



Conseils d'utilisation

Les outils de ce kit pédagogique ont été imaginés pour être utilisés facilement par l'élève, soit pour acquérir une compétence (techniques opératoires, numération, conversions...), soit pour l'aider dans sa démarche ou sa réflexion lors de la résolution d'un exercice ou d'un problème numérique.

Les gabarits et tableaux sont conçus pour être glissés dans une pochette en plastique transparente. Les élèves écrivent avec un feutre à ardoise ou un crayon de couleur gras qu'ils peuvent effacer.

Gabarits pour les opérations

Les enfants dyspraxiques ont des difficultés à poser des opérations en raison de leurs troubles de repérage spatial. Pour les aider, on peut remplacer les normes spatiales par des normes de couleur : les unités en bleu, les dizaines en rouge, les centaines en vert et les milliers en noir.

Afin de ne pas multiplier le nombre de tableaux, l'enseignant donne à l'enfant le tableau qui correspond au plus grand nombre de colonnes et de lignes des opérations correspondant au niveau de sa classe.

Tableaux de numération et conversion

La numération arabe repose sur les relations spatiales entre les chiffres (dizaines à gauche, unités à droite). Les perturbations des représentations spatiales des enfants dyspraxiques ne leur permettent pas toujours de faire la différence entre 21 et 12. Il est alors utile de remplacer la norme spatiale par une norme de couleur, par exemple centaine en vert, dizaine en rouge et unité en bleu.

Tables d'addition et de multiplication, maisons des nombres

Certains enfants dyspraxiques ne parviennent pas à retenir les tables d'addition et de multiplication. Il peut être très utile de leur donner accès à un aide-mémoire auquel ils puissent se référer.



Kit Mathématiques

Dans cette pochette vous trouverez :

Un sommaire et les conseils d'utilisation,

- Trois aide-mémoires (Les maisons des nombres, les tables d'addition, les tables de multiplication)
- Quatre tableaux de conversion (masse, capacité, longueur, aire)
- Un tableau de conversion vierge
- Un tableau de numération (centaines, dizaines, unités)
- Un tableau d'introduction à la classe des mille
- Un tableau de numération (milliers)
- Un tableau de numération (milliards)
- Les additions à 2 lignes et 2 colonnes
- Les additions à 2 lignes et 3 colonnes
- Les additions à 2 lignes et 4 colonnes
- Les additions à 3 lignes et 2 colonnes
- Les additions à 3 lignes et 3 colonnes
- Les additions à 3 lignes et 4 colonnes
- Les additions à 4 lignes et 4 colonnes
- Les additions à 5 lignes et 4 colonnes
- Les soustractions par emprunt et traditionnelles à 2 lignes et 2 colonnes
- Les soustractions par emprunt et traditionnelles à 2 lignes et 3 colonnes
- Les soustractions par emprunt et traditionnelles à 2 lignes et 4 colonnes
- Les multiplications à un chiffre
- Les multiplications à deux chiffres
- Les divisions à un ou deux chiffres
- Les opérations sur les durées : addition + notice
- Les opérations sur les durées : soustraction + notice

1

$0 + 1$

$1 + 0$

2

$0 + 2$

$2 + 0$

$1 + 1$

3

$0 + 3$

$3 + 0$

$1 + 2$

$2 + 1$

4

$0 + 4$

$4 + 0$

$1 + 3$

$3 + 1$

$2 + 2$

5

$0 + 5$

$5 + 0$

$1 + 4$

$4 + 1$

$2 + 3$

$3 + 2$

6

$0 + 6$

$6 + 0$

$1 + 5$

$5 + 1$

$2 + 4$

$4 + 2$

$3 + 3$

7

$0 + 7$

$7 + 0$

$1 + 6$

$6 + 1$

$2 + 5$

$5 + 2$

$3 + 4$

$4 + 3$

8

$0 + 8$

$8 + 0$

$1 + 7$

$7 + 1$

$2 + 6$

$6 + 2$

$3 + 5$

$5 + 3$

$4 + 4$

9

$0 + 9$

$9 + 0$

$1 + 8$

$8 + 1$

$2 + 7$

$7 + 2$

$3 + 6$

$6 + 3$

$4 + 5$

$5 + 4$

10

$0 + 10$

$10 + 0$

$1 + 9$

$9 + 1$

$2 + 8$

$8 + 2$

$3 + 7$

$7 + 3$

$4 + 6$

$6 + 4$

$5 + 5$

Table de 1	Table de 2	Table de 3	Table de 4	Table de 5	Table de 6	Table de 7	Table de 8	Table de 9	Table de 10
$1 + 0 = 1$	$2 + 0 = 2$	$3 + 0 = 3$	$4 + 0 = 4$	$5 + 0 = 5$	$6 + 0 = 6$	$7 + 0 = 7$	$8 + 0 = 8$	$9 + 0 = 9$	$10 + 0 = 10$
$1 + 1 = 2$	$2 + 1 = 3$	$3 + 1 = 4$	$4 + 1 = 5$	$5 + 1 = 6$	$6 + 1 = 7$	$7 + 1 = 8$	$8 + 1 = 9$	$9 + 1 = 10$	$10 + 1 = 11$
$1 + 2 = 3$	$2 + 2 = 4$	$3 + 2 = 5$	$4 + 2 = 6$	$5 + 2 = 7$	$6 + 2 = 8$	$7 + 2 = 9$	$8 + 2 = 10$	$9 + 2 = 11$	$10 + 2 = 12$
$1 + 3 = 4$	$2 + 3 = 5$	$3 + 3 = 6$	$4 + 3 = 7$	$5 + 3 = 8$	$6 + 3 = 9$	$7 + 3 = 10$	$8 + 3 = 11$	$9 + 3 = 12$	$10 + 3 = 13$
$1 + 4 = 5$	$2 + 4 = 6$	$3 + 4 = 7$	$4 + 4 = 8$	$5 + 4 = 9$	$6 + 4 = 10$	$7 + 4 = 11$	$8 + 4 = 12$	$9 + 4 = 13$	$10 + 4 = 14$
$1 + 5 = 6$	$2 + 5 = 7$	$3 + 5 = 8$	$4 + 5 = 9$	$5 + 5 = 10$	$6 + 5 = 11$	$7 + 5 = 12$	$8 + 5 = 13$	$9 + 5 = 14$	$10 + 5 = 15$
$1 + 6 = 7$	$2 + 6 = 8$	$3 + 6 = 9$	$4 + 6 = 10$	$5 + 6 = 11$	$6 + 6 = 12$	$7 + 6 = 13$	$8 + 6 = 14$	$9 + 6 = 15$	$10 + 6 = 16$
$1 + 7 = 8$	$2 + 7 = 9$	$3 + 7 = 10$	$4 + 7 = 11$	$5 + 7 = 12$	$6 + 7 = 13$	$7 + 7 = 14$	$8 + 7 = 15$	$9 + 7 = 16$	$10 + 7 = 17$
$1 + 8 = 9$	$2 + 8 = 10$	$3 + 8 = 11$	$4 + 8 = 12$	$5 + 8 = 13$	$6 + 8 = 14$	$7 + 8 = 15$	$8 + 8 = 16$	$9 + 8 = 17$	$10 + 8 = 18$
$1 + 9 = 10$	$2 + 9 = 11$	$3 + 9 = 12$	$4 + 9 = 13$	$5 + 9 = 14$	$6 + 9 = 15$	$7 + 9 = 16$	$8 + 9 = 17$	$9 + 9 = 18$	$10 + 9 = 19$
$1 + 10 = 11$	$2 + 10 = 12$	$3 + 10 = 13$	$4 + 10 = 14$	$5 + 10 = 15$	$6 + 10 = 16$	$7 + 10 = 17$	$8 + 10 = 18$	$9 + 10 = 19$	$10 + 10 = 20$

Table de 2

$$2 \times 0 = 0$$

$$2 \times 1 = 2$$

$$2 \times 2 = 4$$

$$2 \times 3 = 6$$

$$2 \times 4 = 8$$

$$2 \times 5 = 10$$

$$2 \times 6 = 12$$

$$2 \times 7 = 14$$

$$2 \times 8 = 16$$

$$2 \times 9 = 18$$

$$2 \times 10 = 20$$

Table de 3

$$3 \times 0 = 0$$

$$3 \times 1 = 3$$

$$3 \times 2 = 6$$

$$3 \times 3 = 9$$

$$3 \times 4 = 12$$

$$3 \times 5 = 15$$

$$3 \times 6 = 18$$

$$3 \times 7 = 21$$

$$3 \times 8 = 24$$

$$3 \times 9 = 27$$

$$3 \times 10 = 30$$

Table de 4

$$4 \times 0 = 0$$

$$4 \times 1 = 4$$

$$4 \times 2 = 8$$

$$4 \times 3 = 12$$

$$4 \times 4 = 16$$

$$4 \times 5 = 20$$

$$4 \times 6 = 24$$

$$4 \times 7 = 28$$

$$4 \times 8 = 32$$

$$4 \times 9 = 36$$

$$4 \times 10 = 40$$

Table de 5

$$5 \times 0 = 0$$

$$5 \times 1 = 5$$

$$5 \times 2 = 10$$

$$5 \times 3 = 15$$

$$5 \times 4 = 20$$

$$5 \times 5 = 25$$

$$5 \times 6 = 30$$

$$5 \times 7 = 35$$

$$5 \times 8 = 40$$

$$5 \times 9 = 45$$

$$5 \times 10 = 50$$

Table de 6

$$6 \times 0 = 0$$

$$6 \times 1 = 6$$

$$6 \times 2 = 12$$

$$6 \times 3 = 18$$

$$6 \times 4 = 24$$

$$6 \times 5 = 30$$

$$6 \times 6 = 36$$

$$6 \times 7 = 42$$

$$6 \times 8 = 48$$

$$6 \times 9 = 54$$

$$6 \times 10 = 60$$

Table de 7

$$7 \times 0 = 0$$

$$7 \times 1 = 7$$

$$7 \times 2 = 14$$

$$7 \times 3 = 21$$

$$7 \times 4 = 28$$

$$7 \times 5 = 35$$

$$7 \times 6 = 42$$

$$7 \times 7 = 49$$

$$7 \times 8 = 56$$

$$7 \times 9 = 63$$

$$7 \times 10 = 70$$

Table de 8

$$8 \times 0 = 0$$

$$8 \times 1 = 8$$

$$8 \times 2 = 16$$

$$8 \times 3 = 24$$

$$8 \times 4 = 32$$

$$8 \times 5 = 40$$

$$8 \times 6 = 48$$

$$8 \times 7 = 56$$

$$8 \times 8 = 64$$

$$8 \times 9 = 72$$

$$8 \times 10 = 80$$

Table de 9

$$9 \times 0 = 0$$

$$9 \times 1 = 9$$

$$9 \times 2 = 18$$

$$9 \times 3 = 27$$

$$9 \times 4 = 36$$

$$9 \times 5 = 45$$

$$9 \times 6 = 54$$

$$9 \times 7 = 63$$

$$9 \times 8 = 72$$

$$9 \times 9 = 81$$

$$9 \times 10 = 90$$

t	q		kg	hg	dag	g	dg	cg	mg

kl	hl	dal	l	dl	cl	ml

km	hm	dam	m	dm	cm	mm

km ²	hm ²	dam ²	m ²	dm ²	cm ²	mm ²

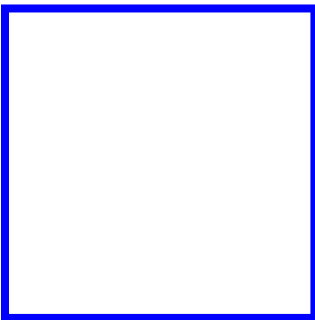
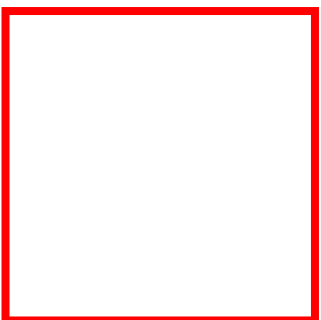
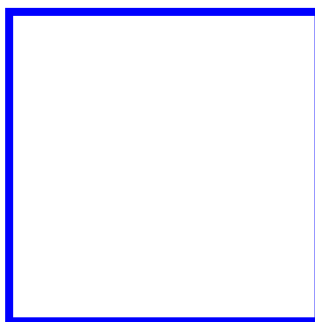
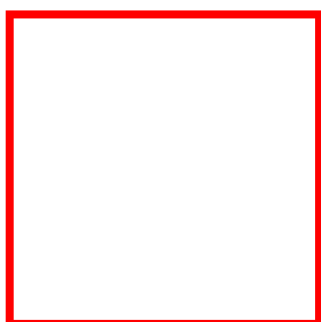
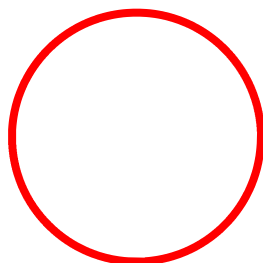
centaines

dizaines

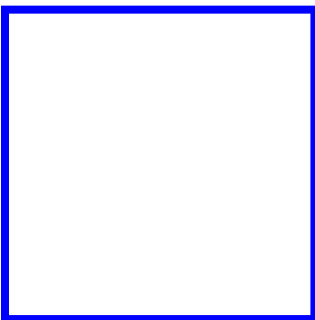
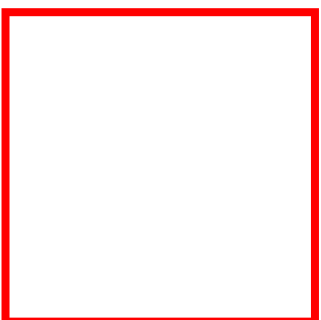
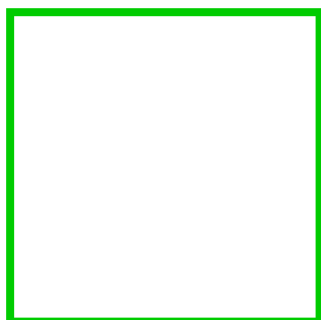
unités

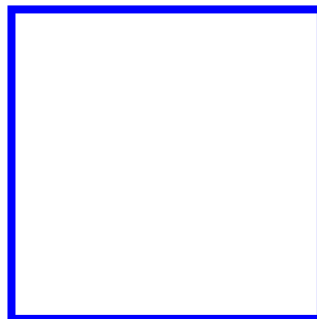
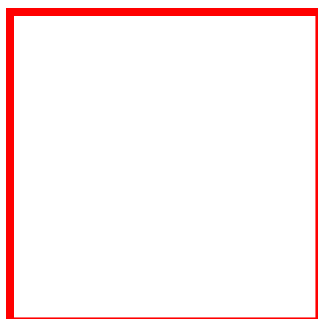
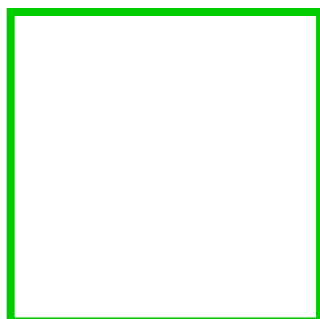
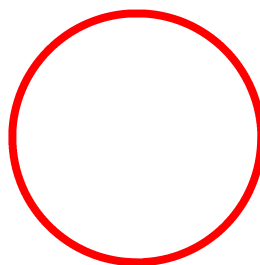
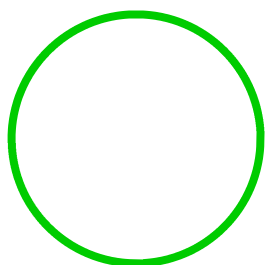
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Classe des milliers			Classe des unités simples		
c	d	u	c	d	u

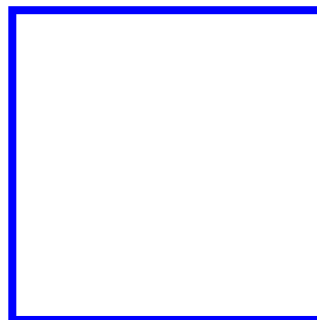
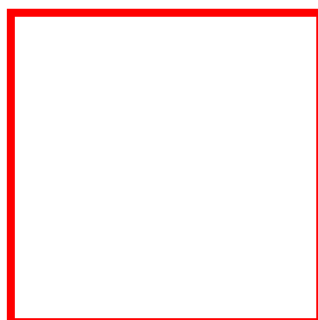
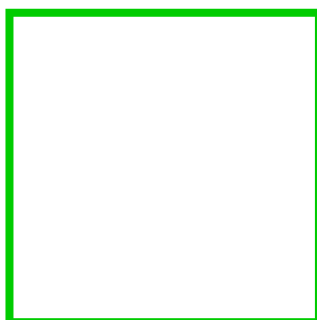
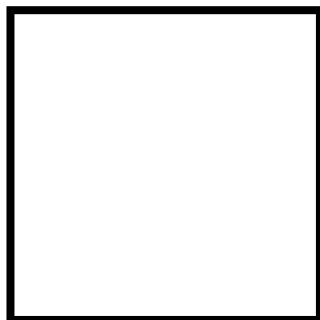
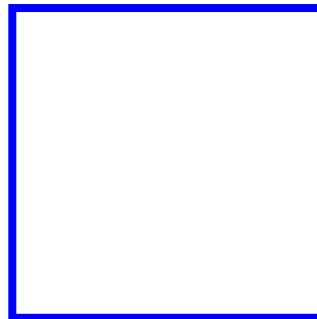
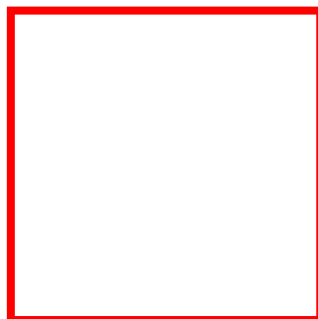
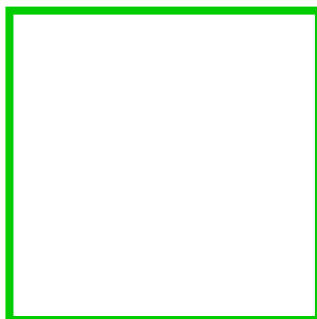


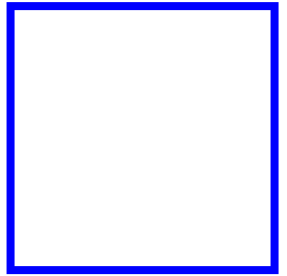
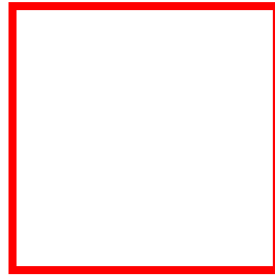
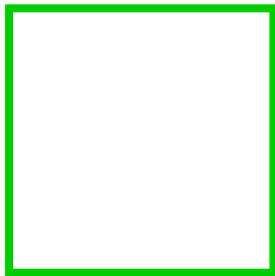
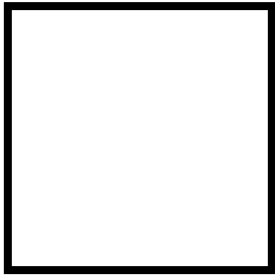
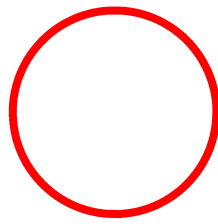
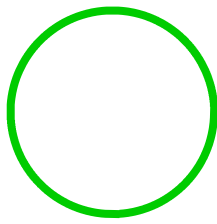
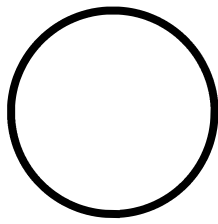
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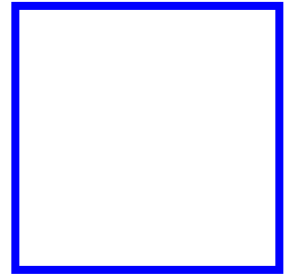
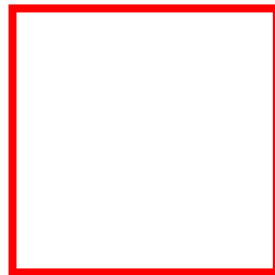
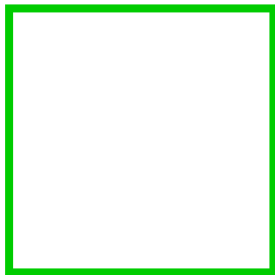
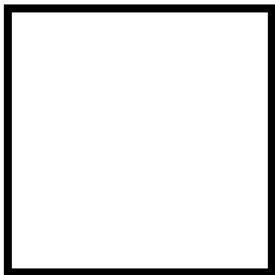
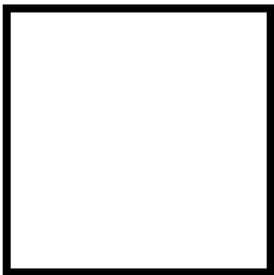
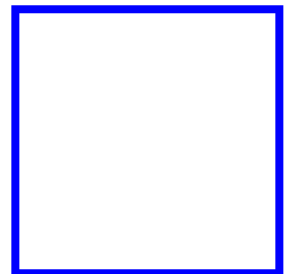
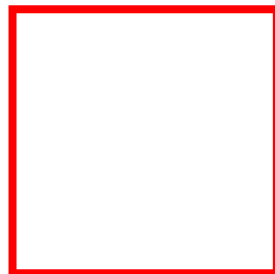
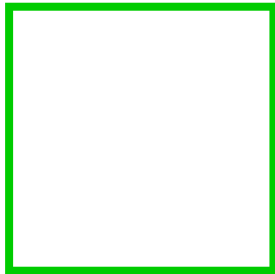
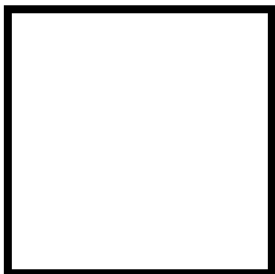


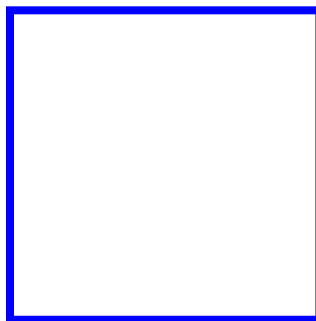
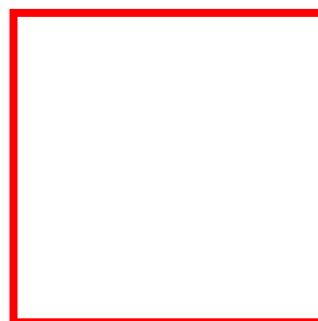
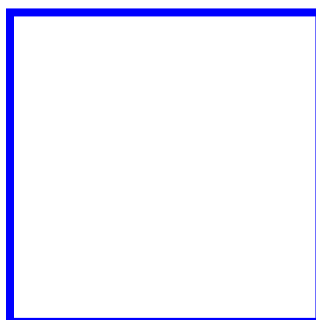
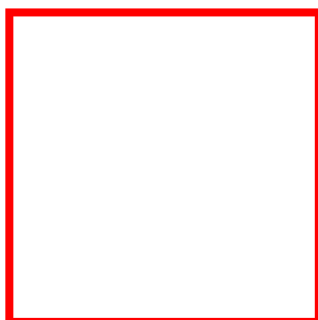
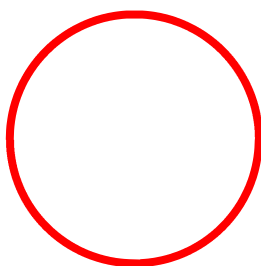
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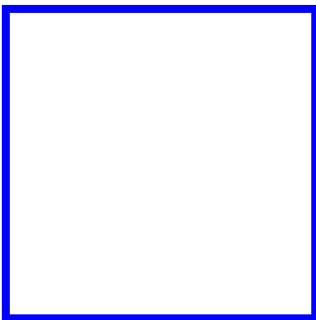
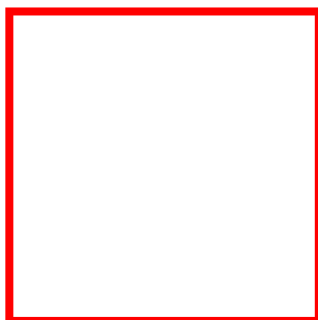


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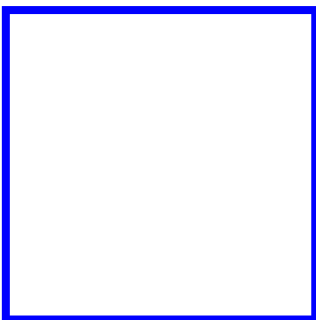
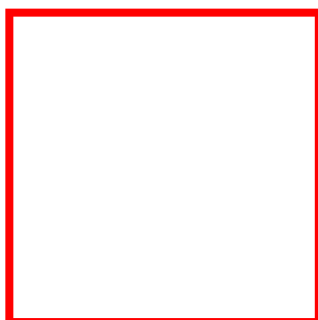
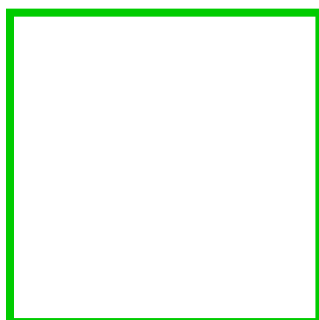


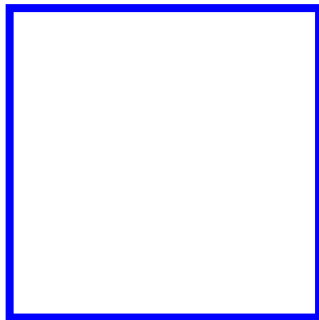
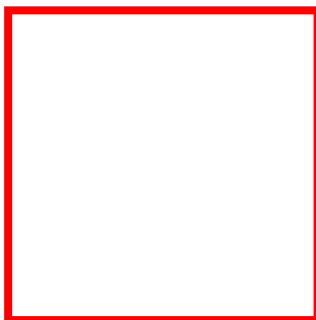
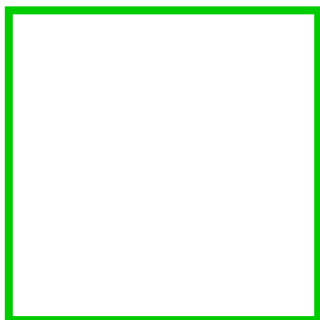
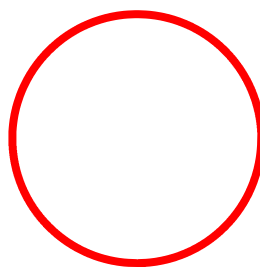
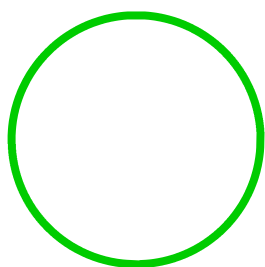


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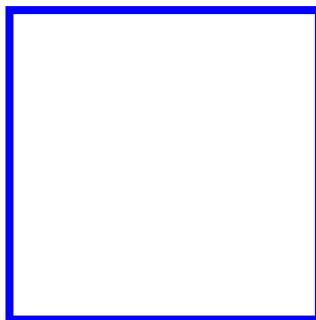
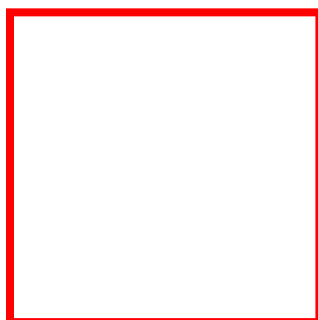
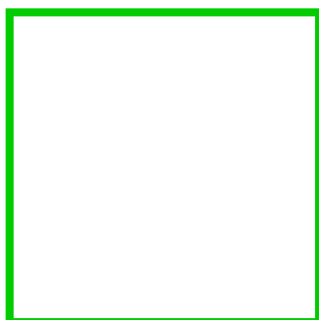


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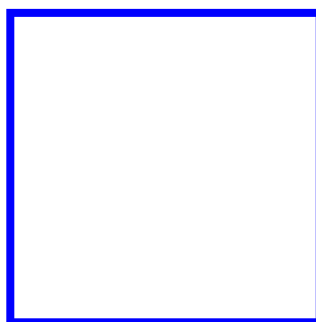
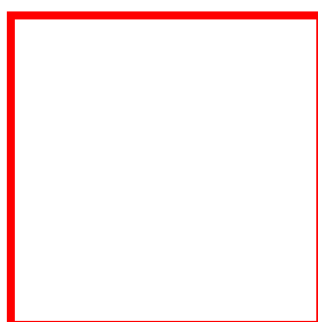
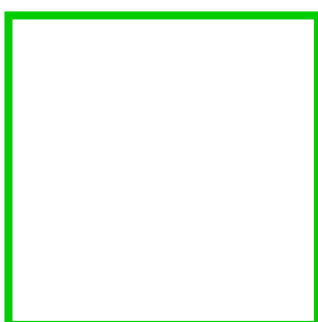
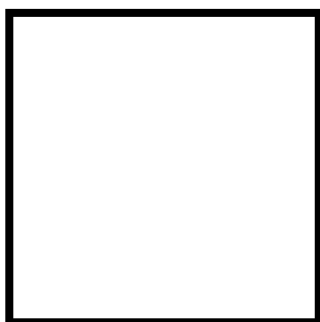
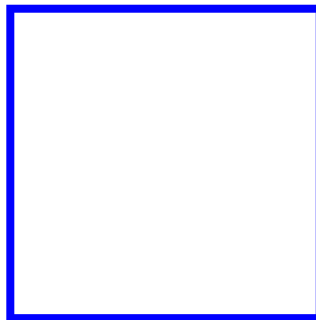
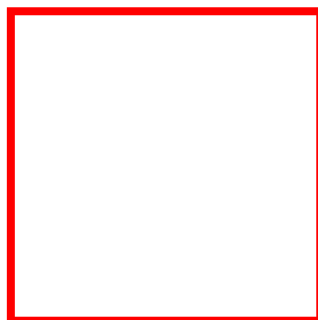
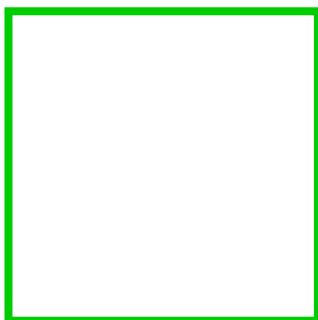


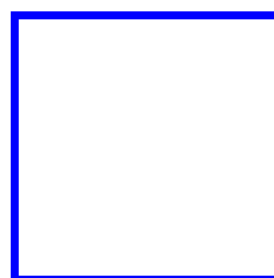
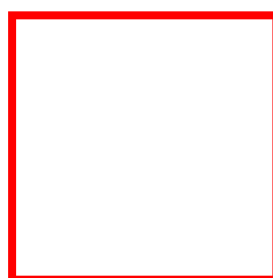
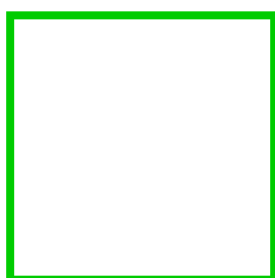
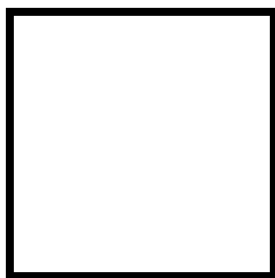
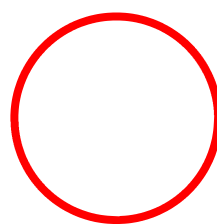
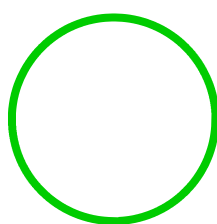
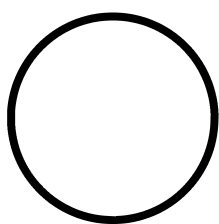


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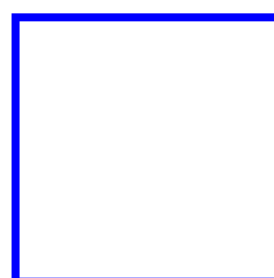
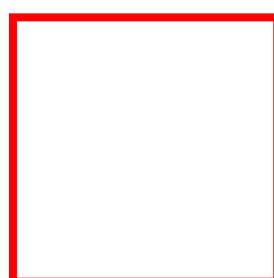
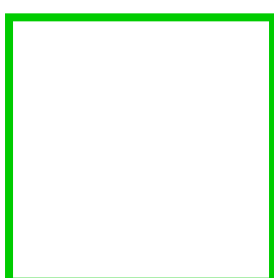
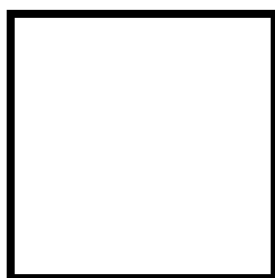


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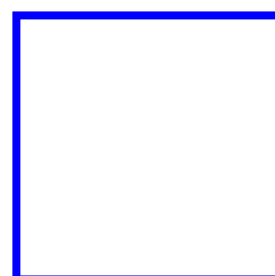
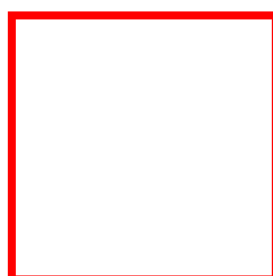
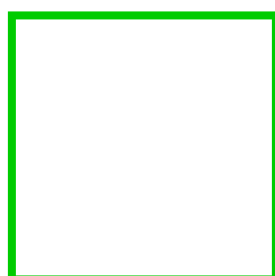
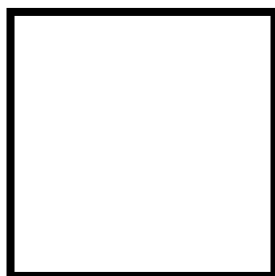
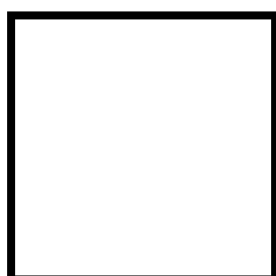
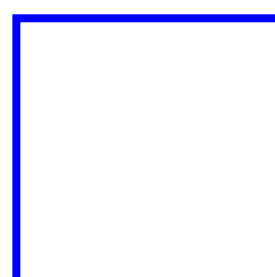
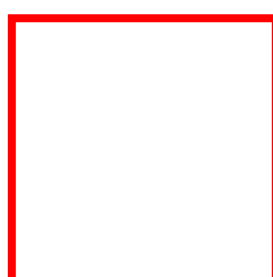
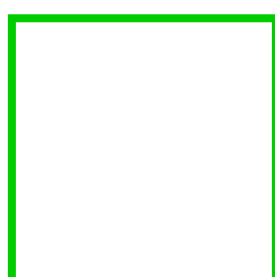
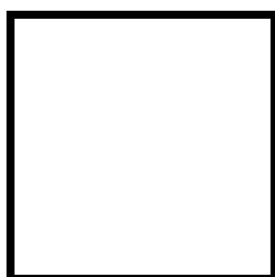


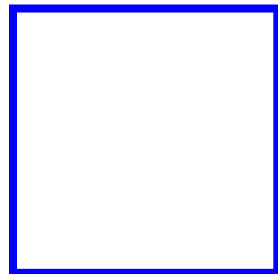
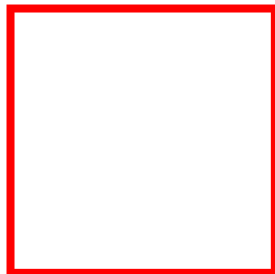
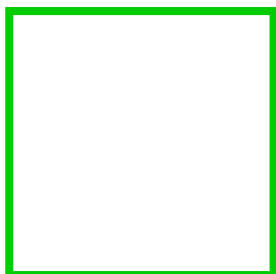
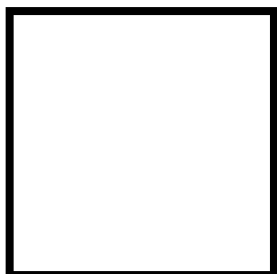
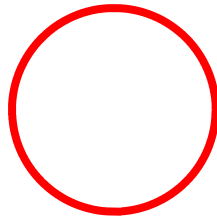
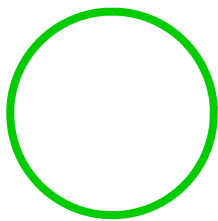
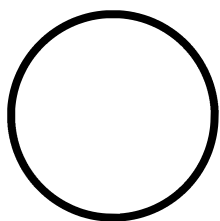


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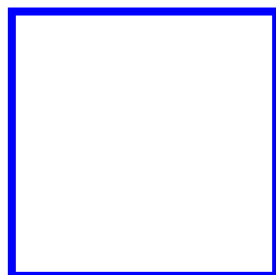
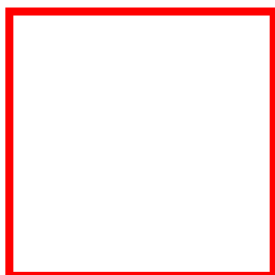
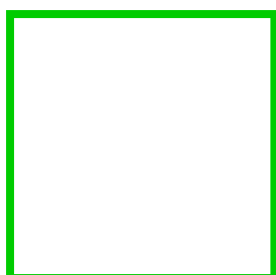
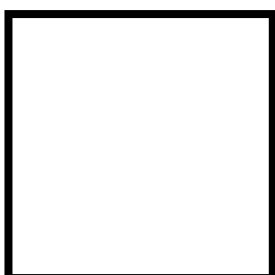


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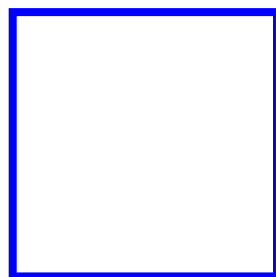
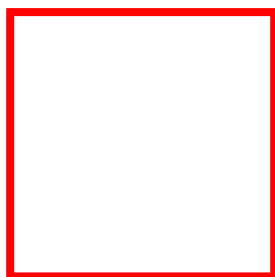
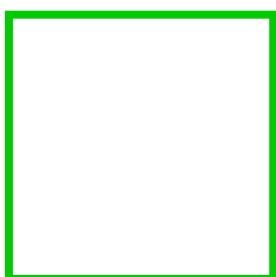
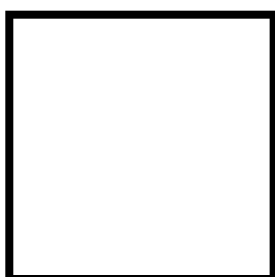




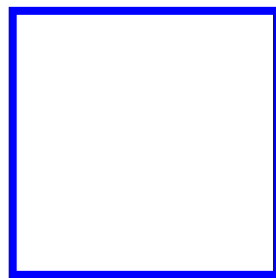
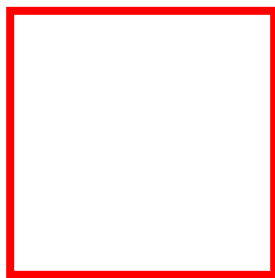
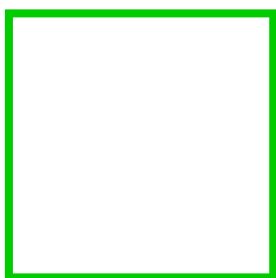
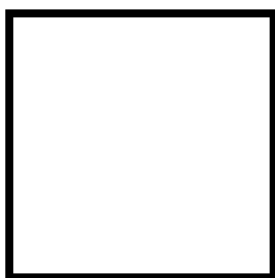
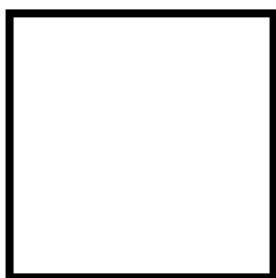
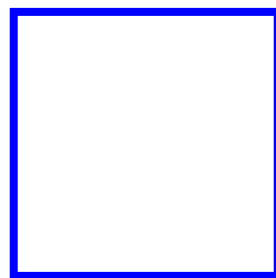
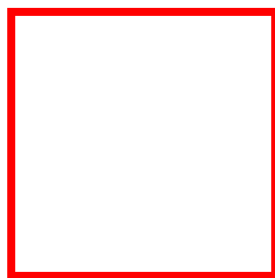
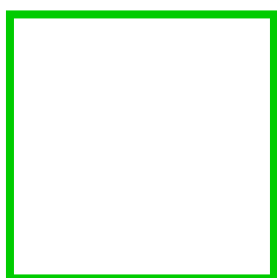
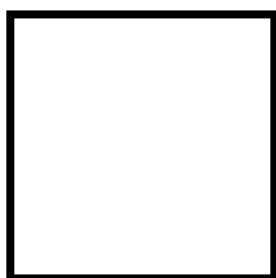
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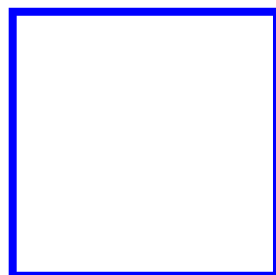
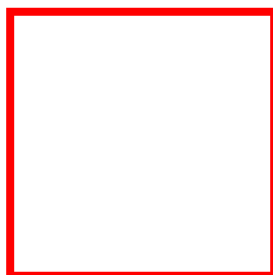
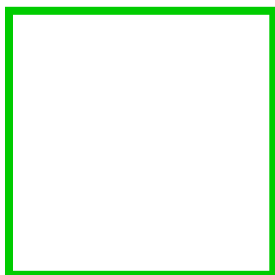
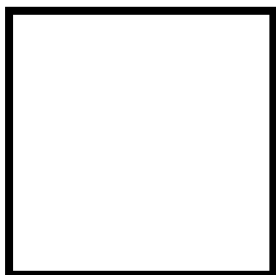
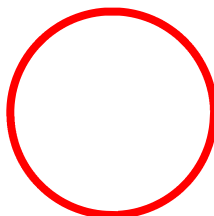
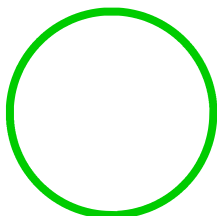
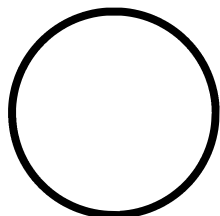


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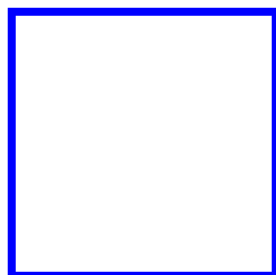
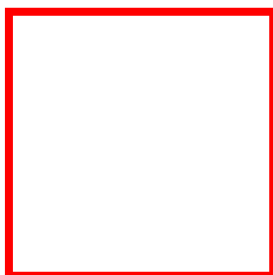
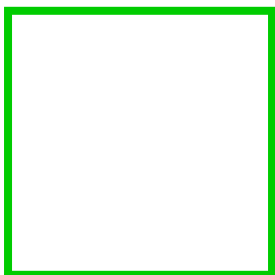
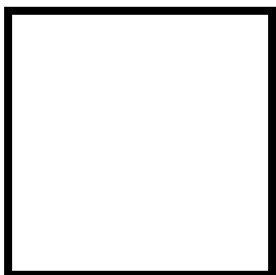


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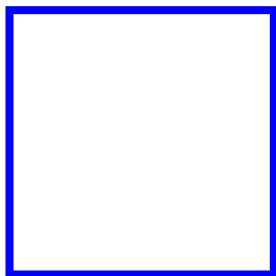
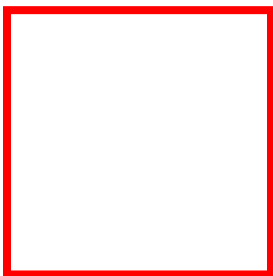
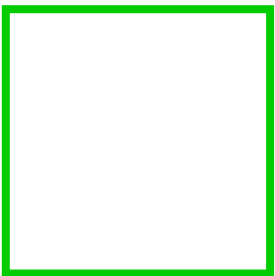
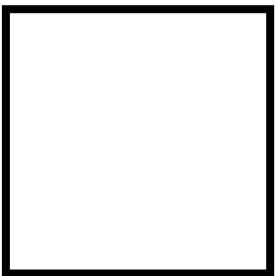




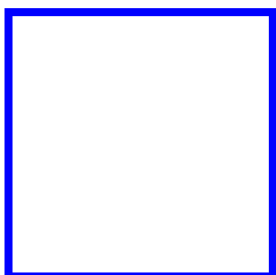
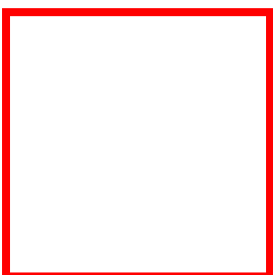
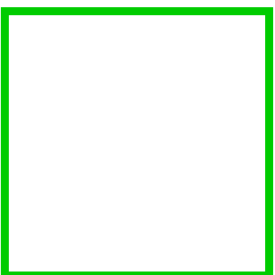
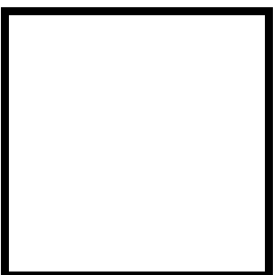
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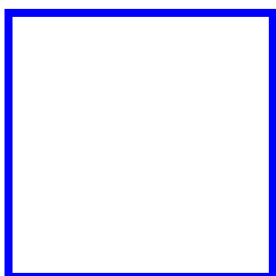
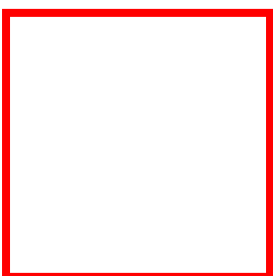
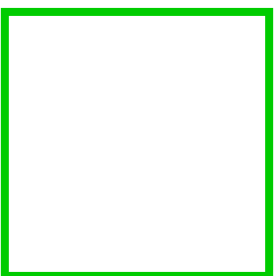
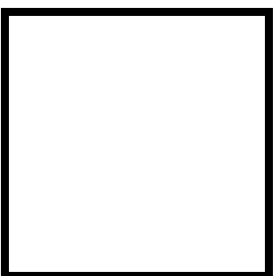
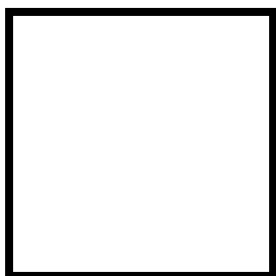
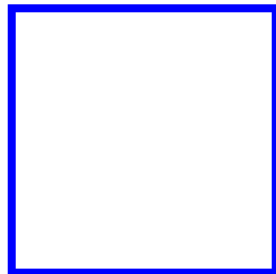
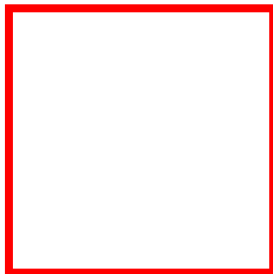
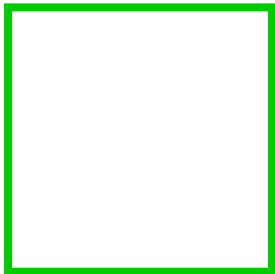
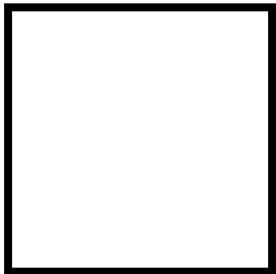
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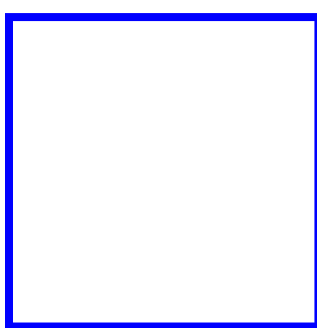
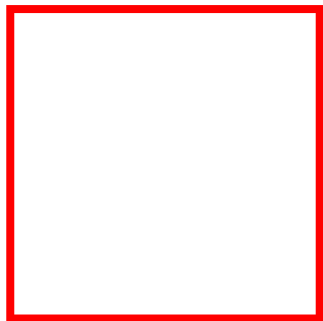
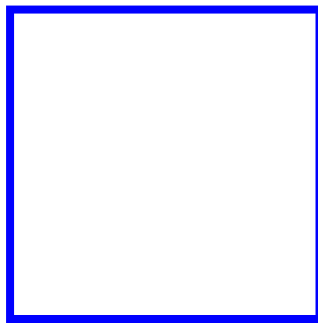
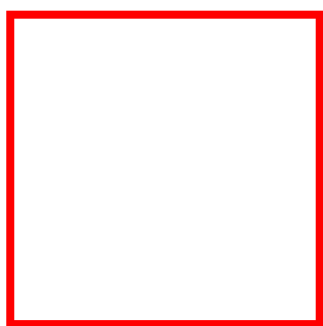
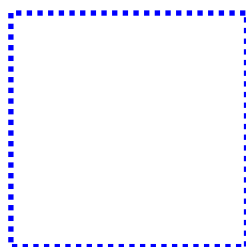
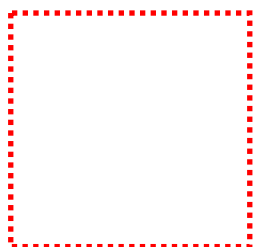


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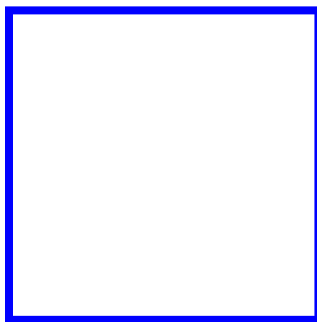
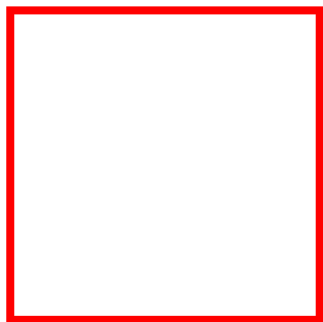


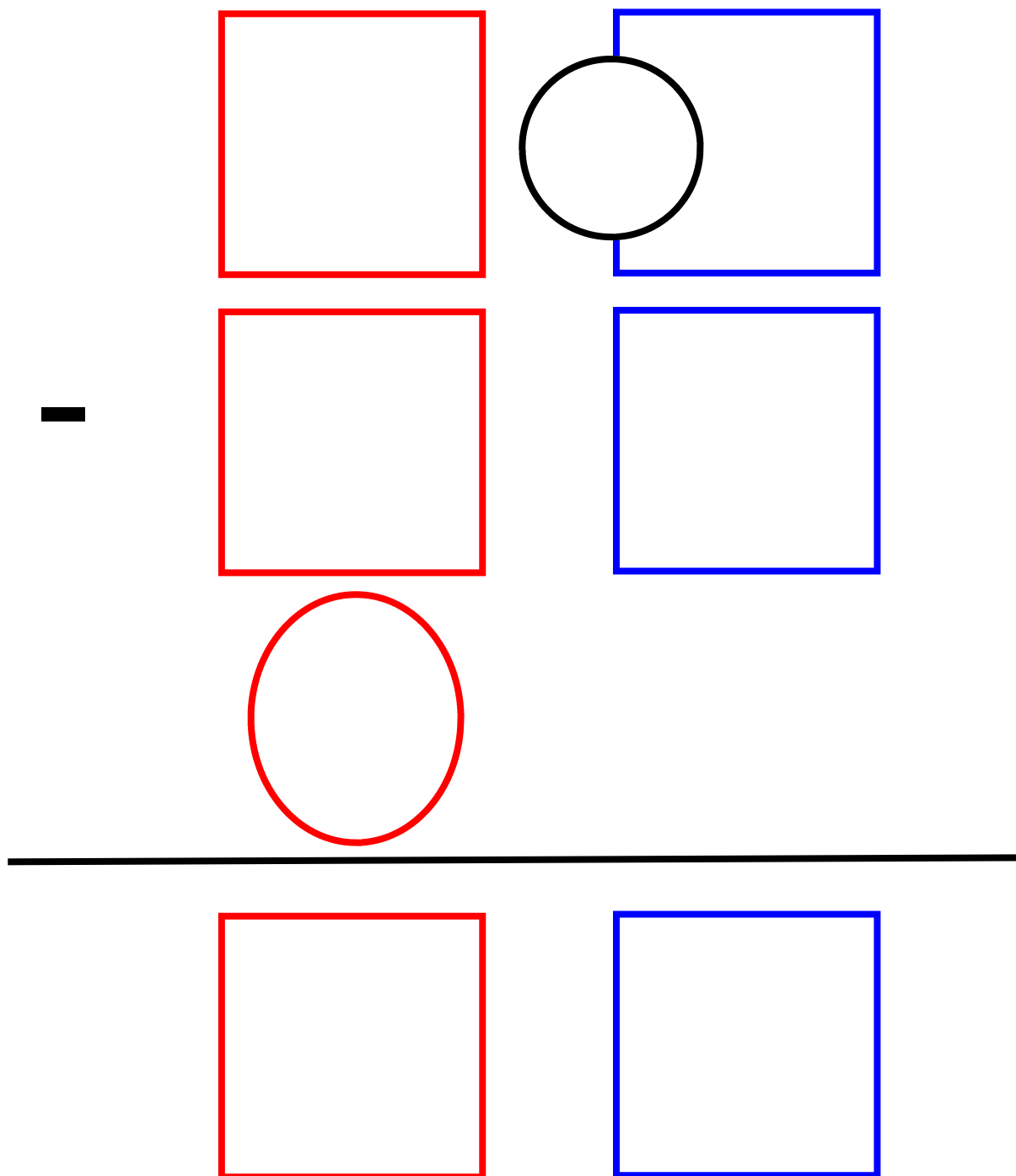
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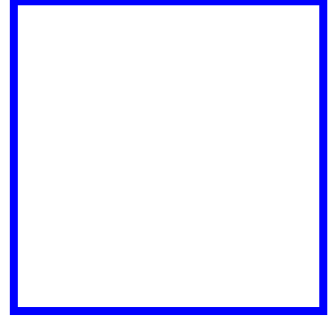
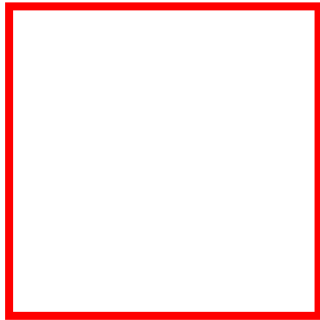
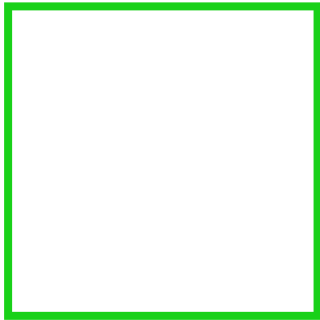
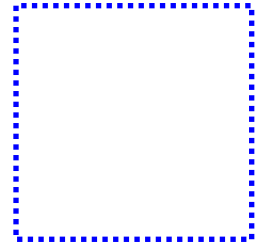
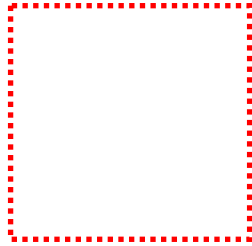
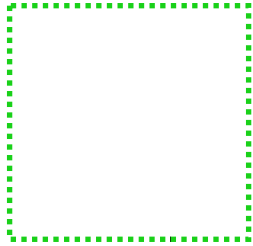




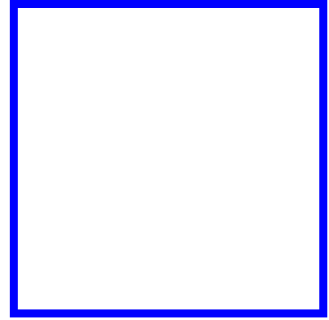
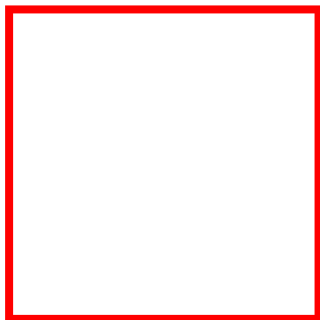
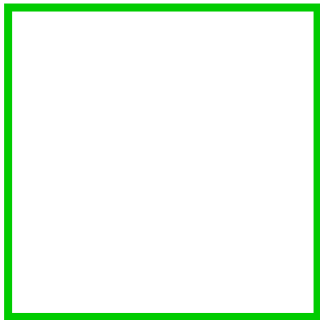
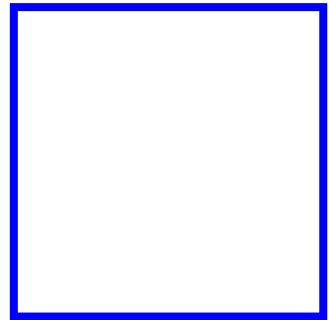
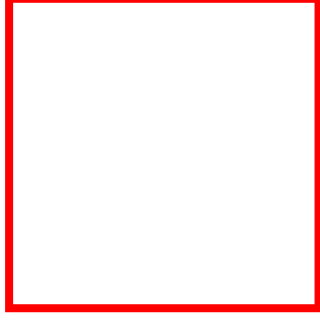
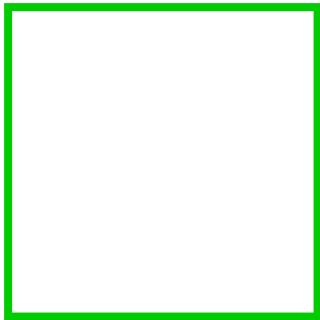
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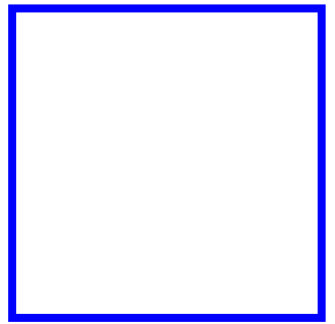
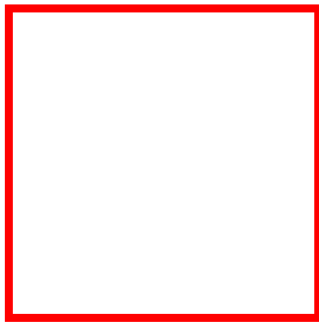
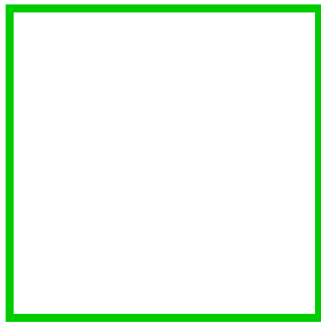
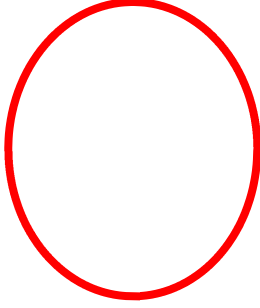
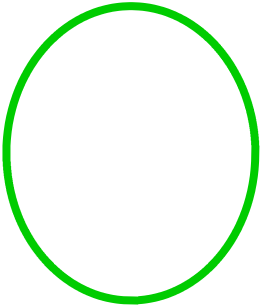
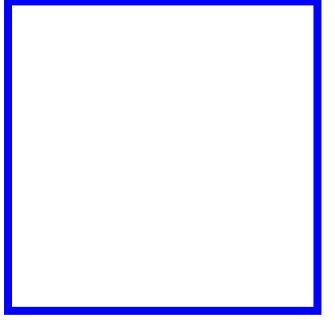
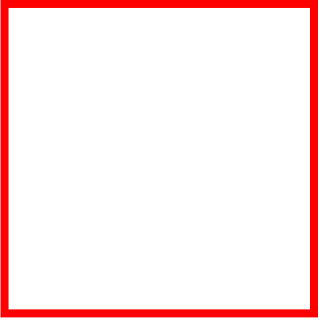
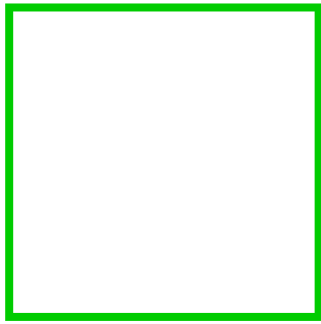
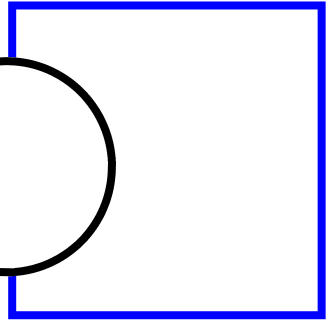
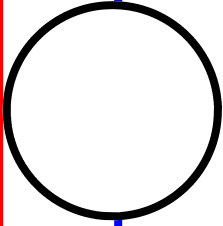
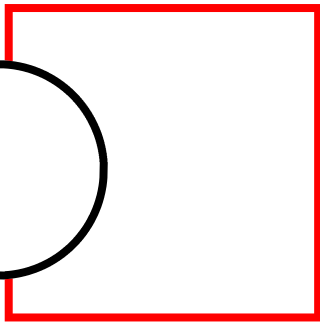
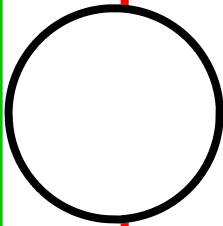
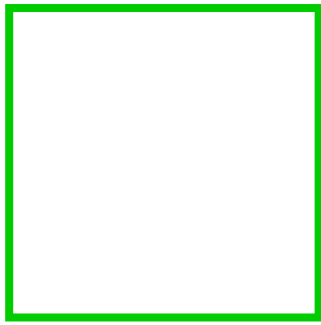


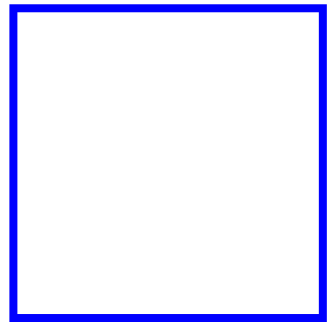
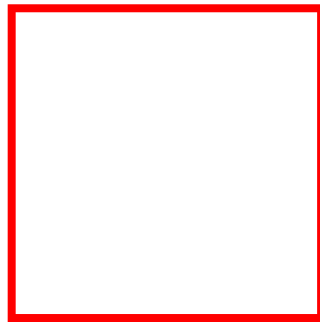
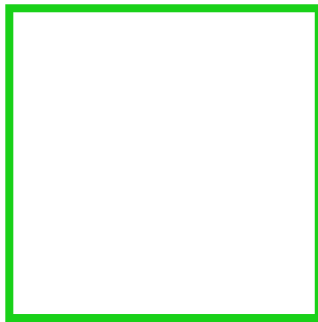
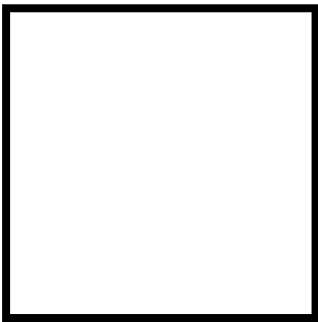
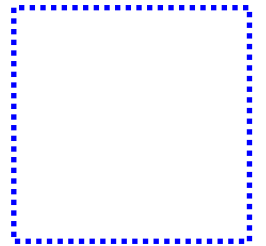
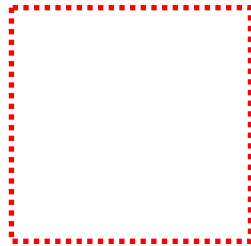
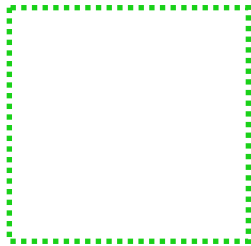
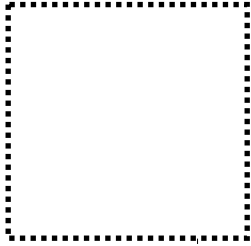




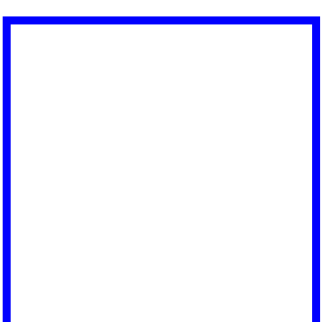
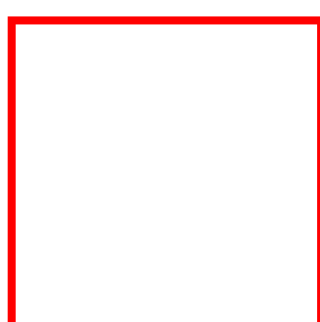
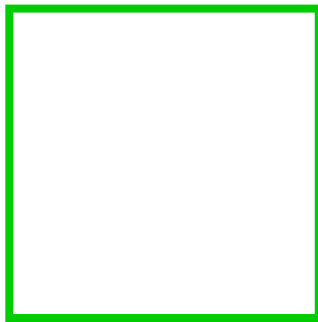
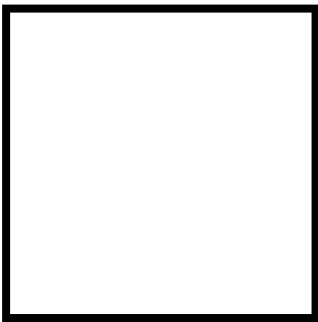
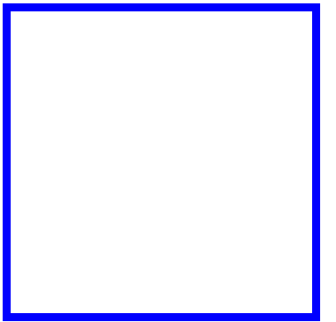
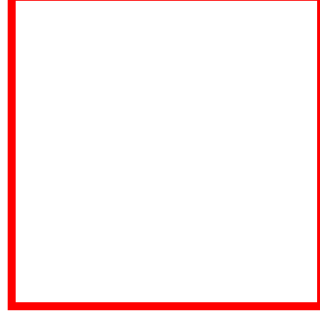
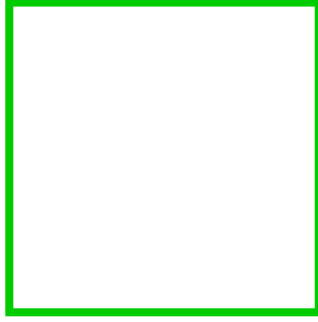
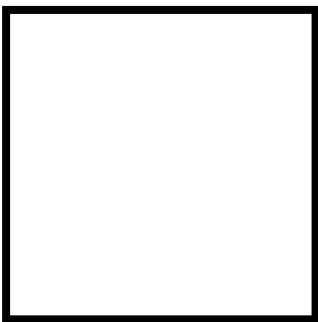
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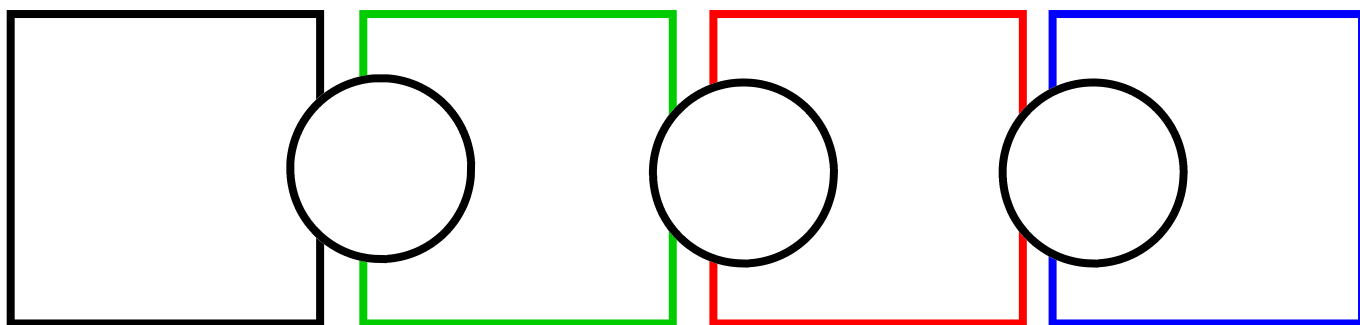




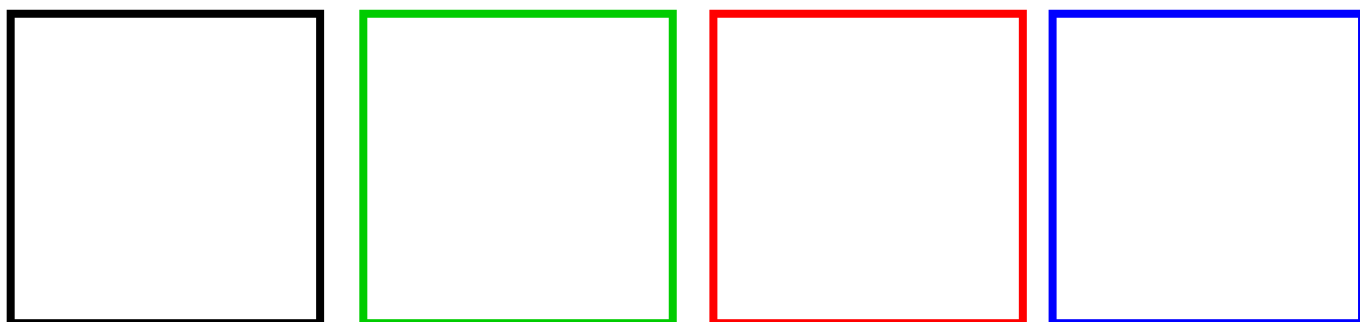
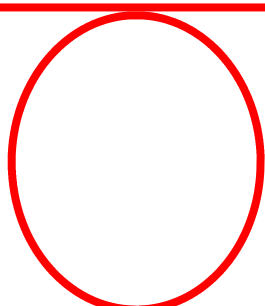
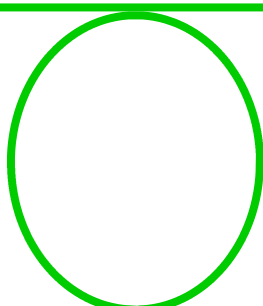
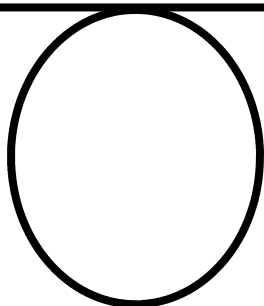
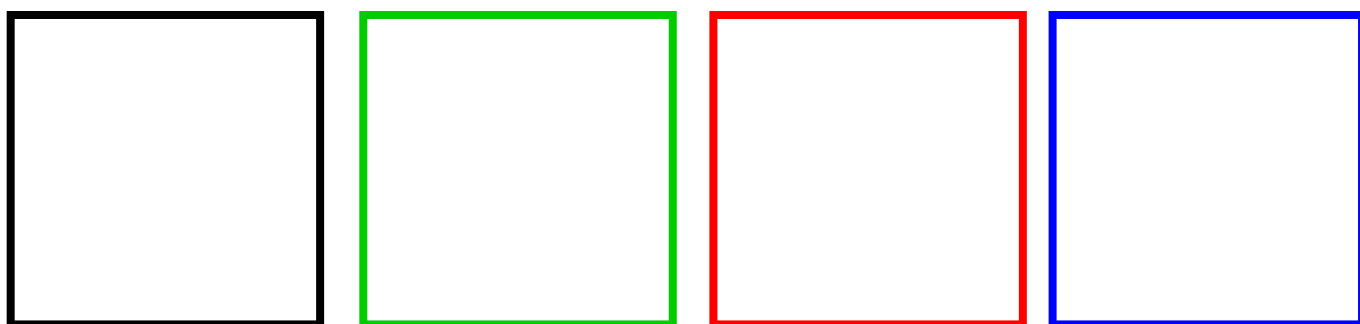


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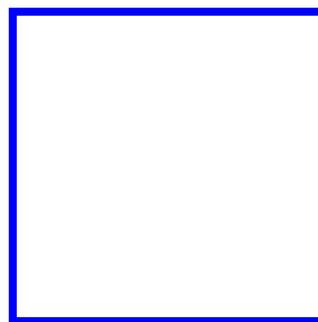
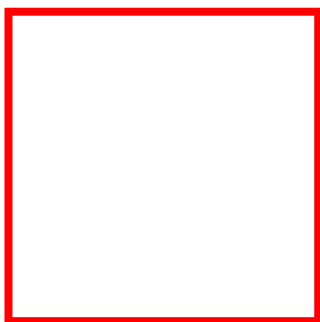
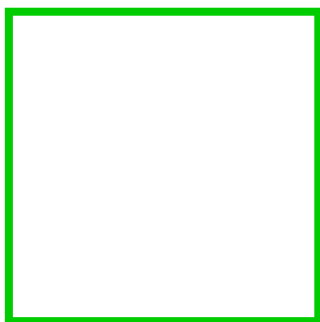
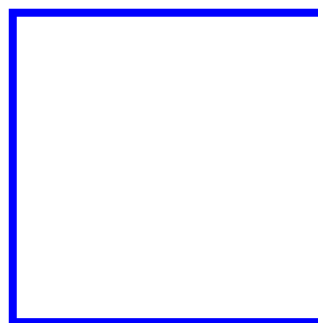
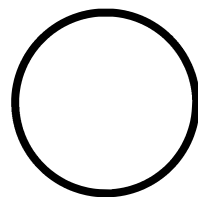
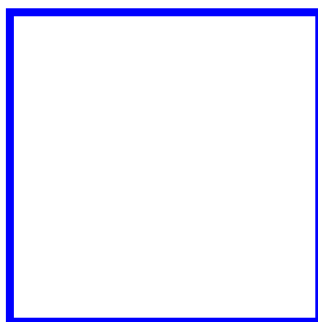
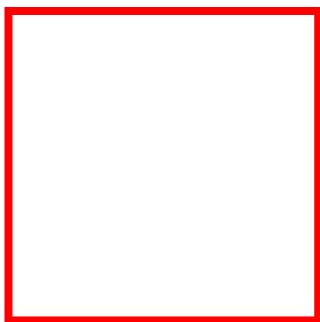


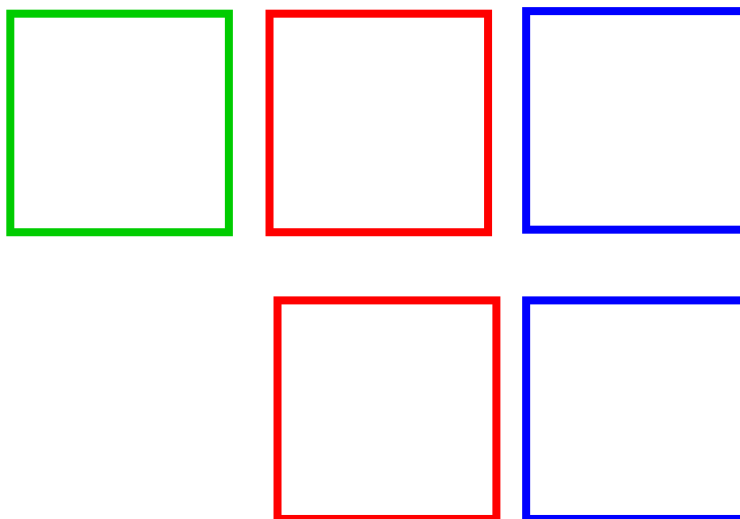
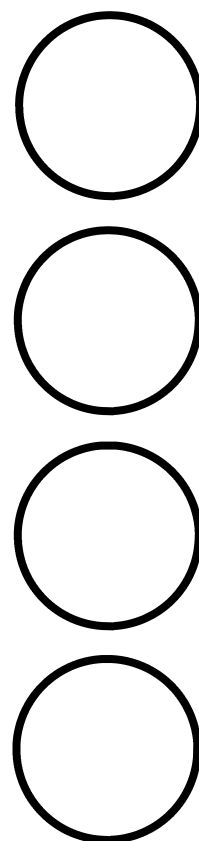


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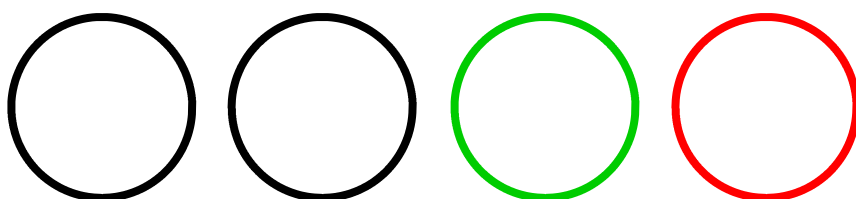


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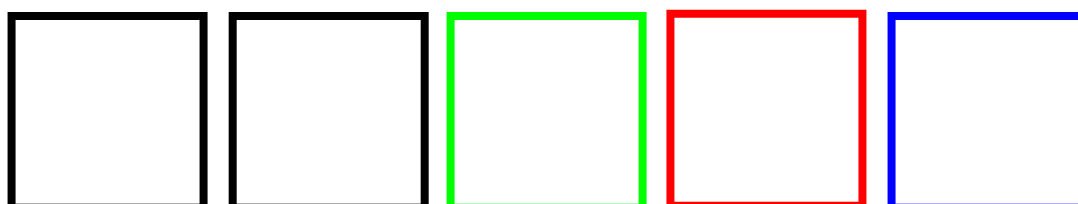
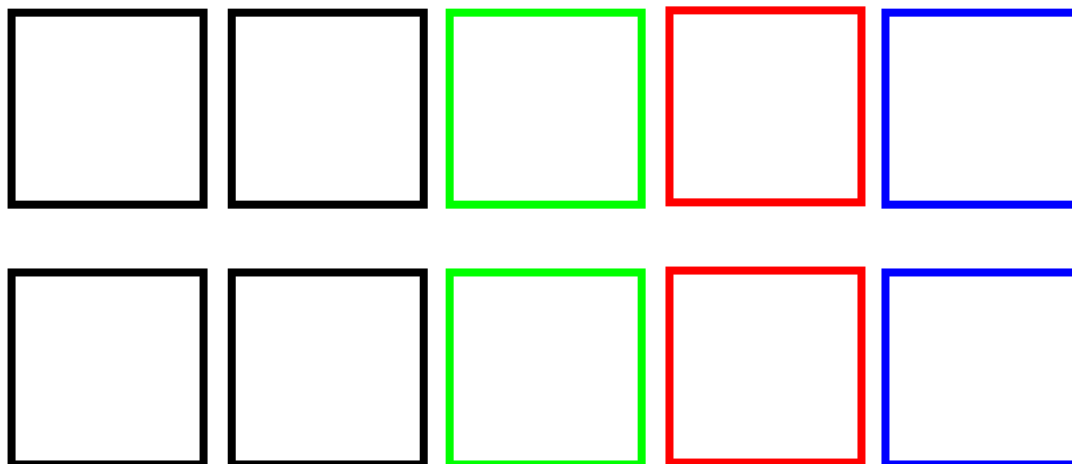




X



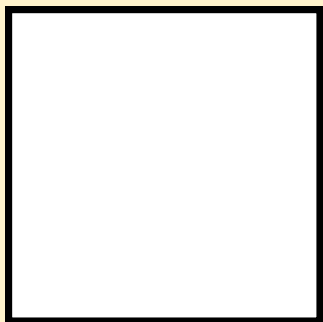
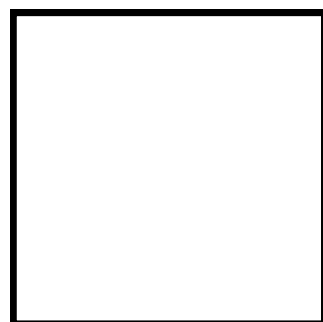
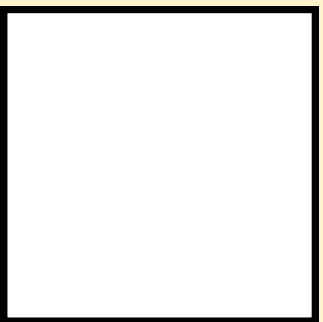
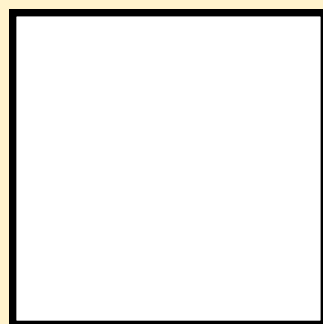
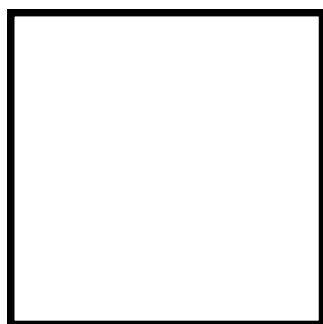
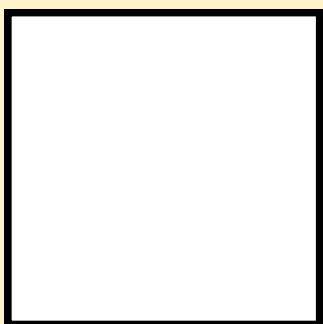
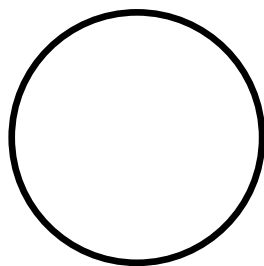
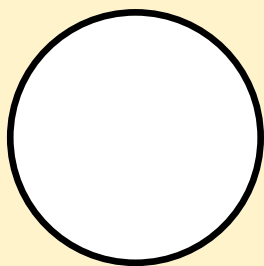
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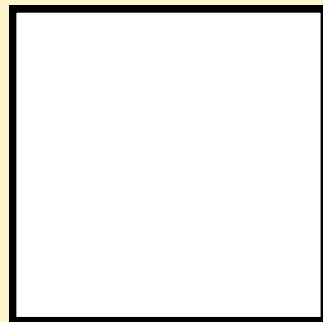
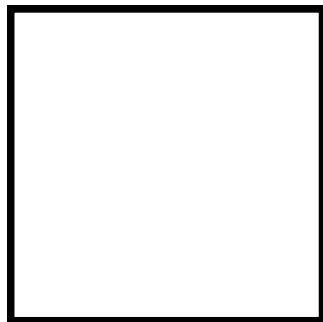
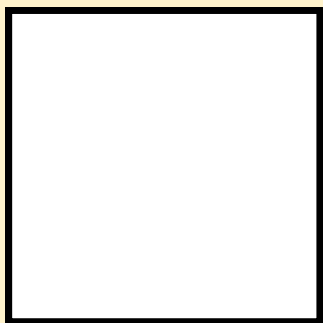
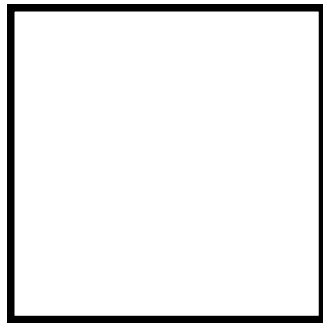
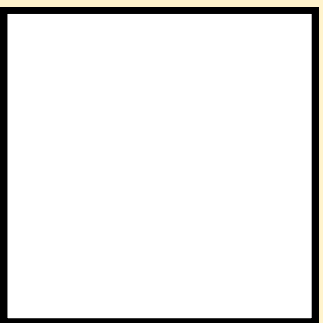
h

mn

s



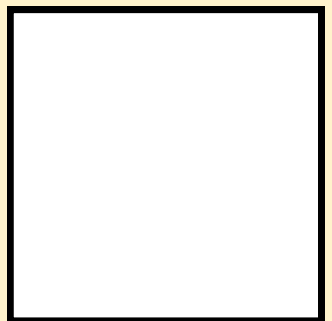
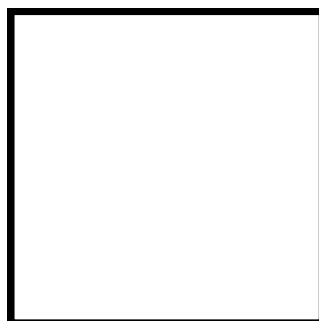
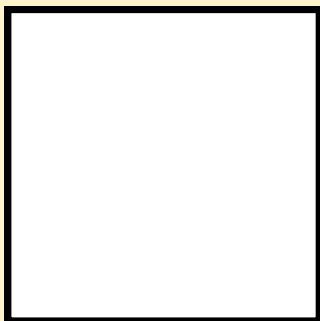
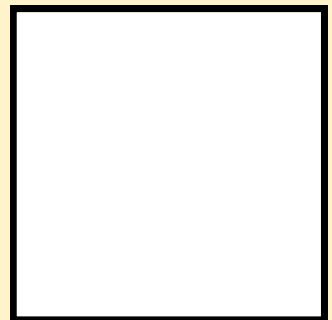
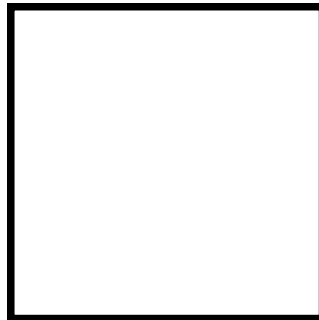
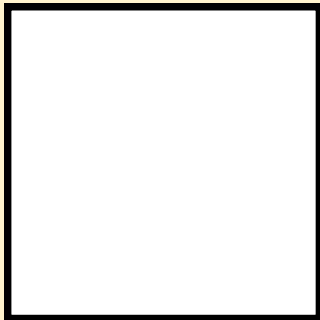
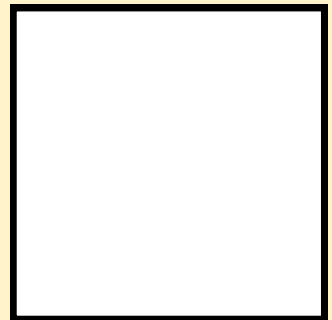
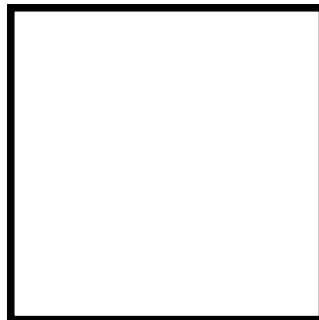
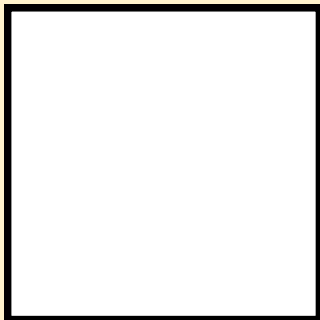
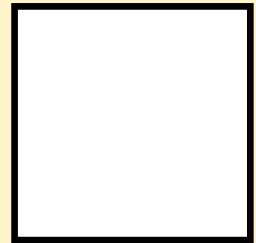
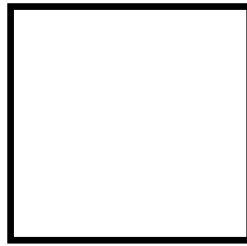
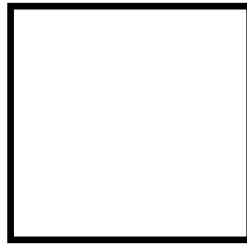
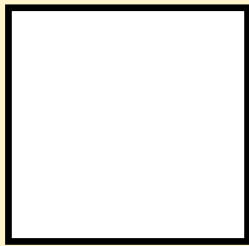
+



h

mn

s



Utiliser le gabarit d'addition d'heures

h	mn	s
○	○	
+		

Étape 1

Gabarit vide

h	mn	s
○	○	
3	46	29
+		
2	57	40

Étape 2

Poser l'opération

h	mn	s
○	○	
3	46	29
+		
2	57	40
		69

Étape 3

Calculer le total des secondes

h	mn	s
○	○	
3	46	29
+		
2	57	40
	103	69
		9

Étape 4

1) Convertir les secondes en minutes. Exemple : 69 s = 1 mn et 9 s.

2) Noter les secondes restantes (ici 9) et ajouter les minutes (ici 1) supplémentaires à la colonne des minutes, puis calculer.

h	mn	s
○	○	
3	46	29
+		
2	57	40
	103	69
	43	9

Étape 5

1) Convertir les minutes en heures. Exemple : 103 mn = 1 h et 43 mn.

2) Noter les minutes restantes (ici 43) et ajouter les heures (ici 1) supplémentaire à la colonne des heures, puis calculer.

Étapes 6 et 7

Pour lire plus facilement le résultat final (ici 6 h 43 mn 9 s) l'élève peut, s'il le souhaite, réécrire le résultat intégral sur la ligne inférieure.

h	mn	s
○	○	
3	46	29
+		
2	57	40
	103	69
6	43	9

h	mn	s
○	○	
3	46	29
+		
2	57	40
	103	69
6	43	9

Utiliser le gabarit de soustraction d'heures

Lorsque le nombre de minutes ou de secondes à retirer est supérieur au nombre de départ :

h	mn	s
-		

Étape 1

Gabarit vide

h	mn	s
7	08	50
-	1	10

Étape 2

Poser l'opération

h	mn	s
	07	110
7	08	50
-	1	10
		59
		51

Étape 3

On ne peut pas soustraire 59 secondes de 50 secondes.

On va donc procéder par emprunt : on emprunte 1 mn au 8 mn initiales (il en reste donc 7), ce qui permet de rajouter 60 s aux 50 s initiales (on en obtient donc 110). Puis on effectue la soustraction $110 - 59 = 51$.

h	mn	s
	67	
6	7	110
7	08	50
-	1	10
		59
	57	51

Étape 4

On ne peut pas soustraire 10 mn de 7 mn. On va donc procéder par emprunt : on emprunte 1 h au 7 h initiales (il en reste donc 6), ce qui permet de rajouter 60 mn aux 7 mn initiales (on en obtient donc 67). Puis on effectue la soustraction $67 - 10 = 57$.

h	mn	s
	67	
6	7	110
7	08	50
-	1	10
		59
5	57	51

Étape 5

Il ne reste plus qu'à calculer la différence entre les heures (ici $6 - 1 = 5$).