

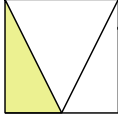
# FRACTIONS : REPRÉSENTATION GÉOMÉTRIQUE

**1** Trois élèves ont voulu colorier un tiers de la surface d'un carré. Les réponses sont-elles correctes ? Justifie.

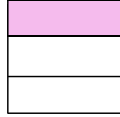
Liam



Lucie



Sofian



- a. Liam : Liam a colorié un quart de la surface.
- b. Lucie : Lucie a colorié un quart de la surface.
- c. Sofian : Sofian a colorié un tiers de la surface.

**2** Pour chaque figure, indique la fraction de la surface totale qui est colorée.

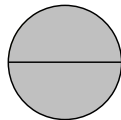
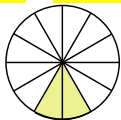
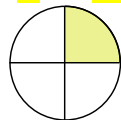
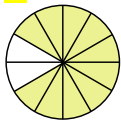


$$\frac{1}{4}$$

$$\frac{3}{4}$$

$$\frac{2}{4} = \frac{1}{2}$$

$$\frac{4}{4} = 1$$

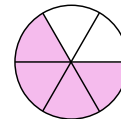
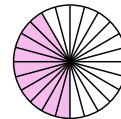
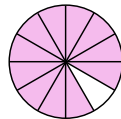
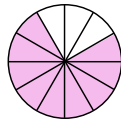


$$\frac{10}{12} = \frac{5}{6}$$

$$\frac{1}{4}$$

$$\frac{2}{12} = \frac{1}{6}$$

$$\frac{1}{2}$$

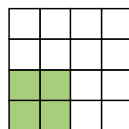
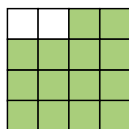
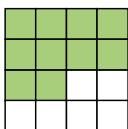


$$\frac{9}{12} = \frac{3}{4}$$

$$\frac{11}{12}$$

$$\frac{10}{24} = \frac{5}{12}$$

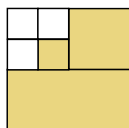
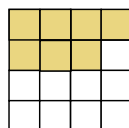
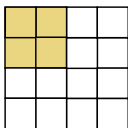
$$\frac{4}{6} = \frac{2}{3}$$



$$\frac{10}{16} = \frac{5}{8}$$

$$\frac{14}{16} = \frac{7}{8}$$

$$\frac{4}{16} = \frac{1}{4}$$

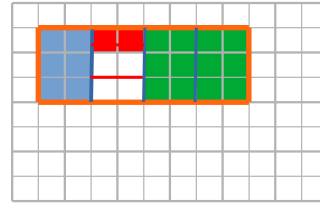


$$\frac{4}{16} = \frac{1}{4}$$

$$\frac{7}{16}$$

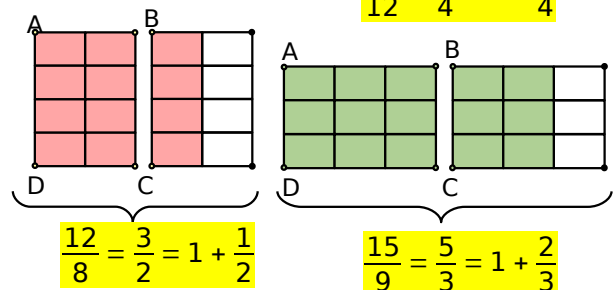
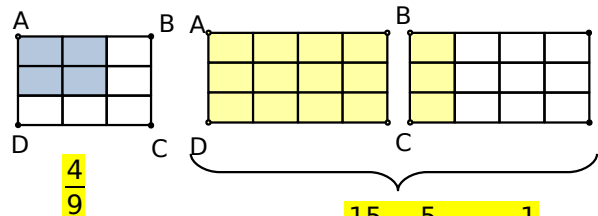
$$\frac{13}{16}$$

**3** Trace ci-dessous un rectangle de 8 cm sur 3 cm. (1 petit carreau représente 1 cm).

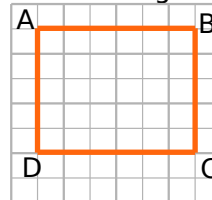


- a. Colorie un quart de ce rectangle en bleu.
- b. Colorie 50 % de ce rectangle en vert.
- c. Colorie en rouge un tiers de la partie non colorée.

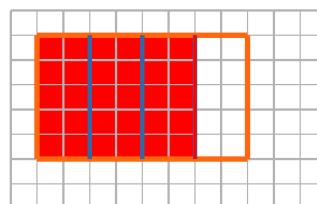
**4** Dans chaque cas, exprime par une fraction la proportion de l'aire de la surface colorée par rapport à celle de la surface du rectangle ABCD (chaque petit rectangle d'une figure a la même aire).



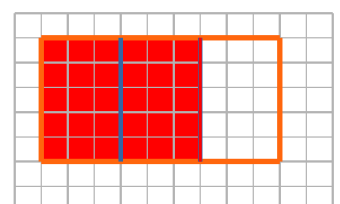
**5** On considère le rectangle ABCD ci-dessous :



On décide que ce rectangle ABCD est l'unité d'aire. Quelle fraction du rectangle ABCD représente alors chacun des rectangles ci-dessous ?



$$\frac{40}{30} = \frac{4}{3} = 1 + \frac{1}{3}$$



$$\frac{45}{30} = \frac{3}{2} = 1 + \frac{1}{2}$$