Lesson 2:
Equivalent Fractions

Circle the different representations of $\frac{1}{3}$ below.
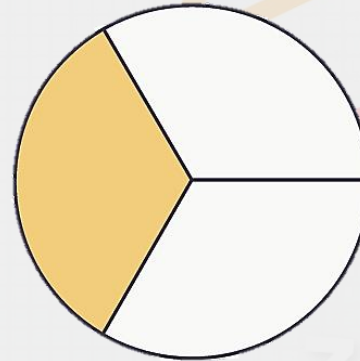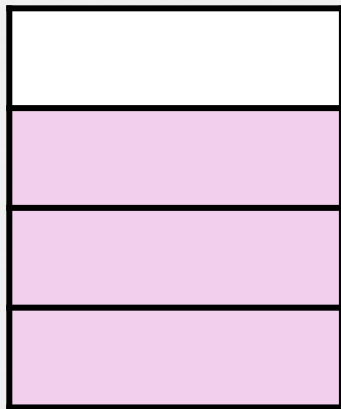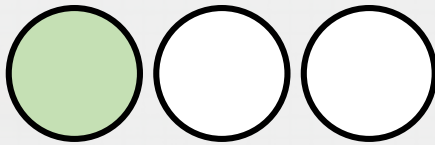
Circle the different representations of $\dfrac{1}{3}$ **below.**
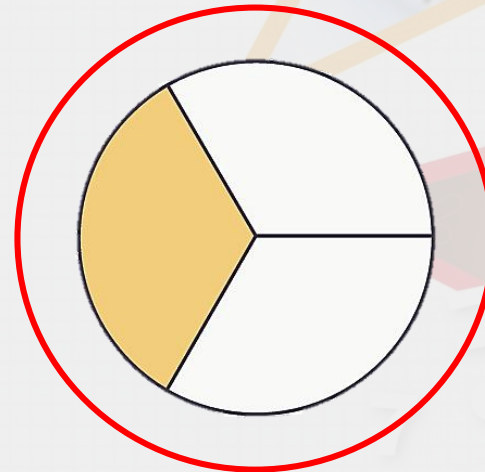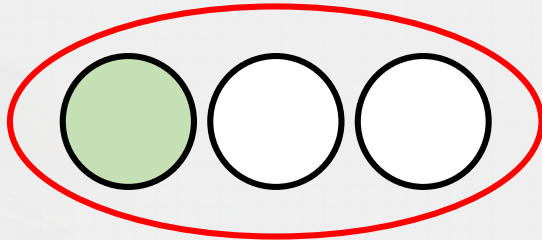
Which images show $\frac{2}{9}$?
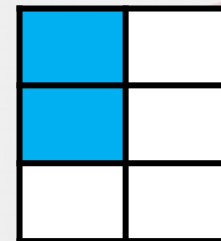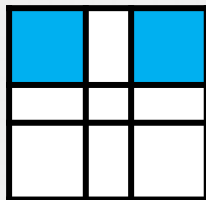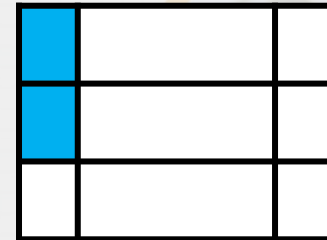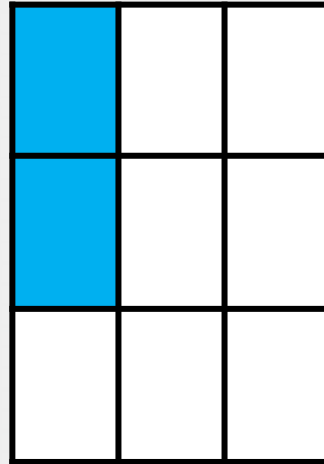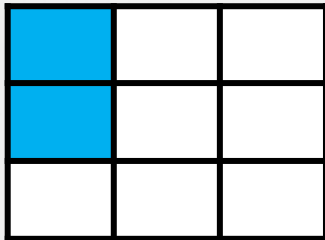
Which images show $\frac{2}{9}$?
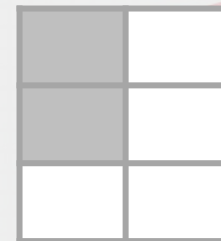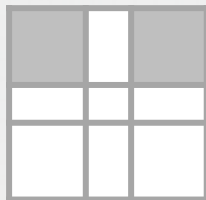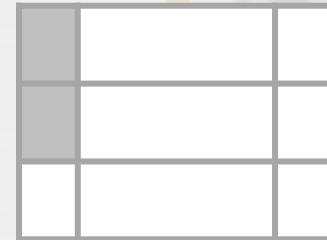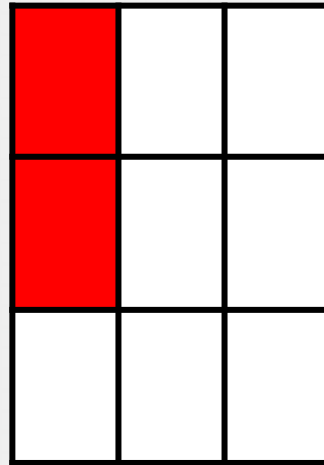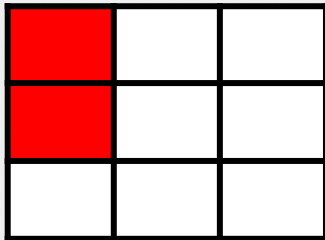
$\frac{2}{9}$ is 2 of 9 equal parts.

Complete the diagram to show the equivalent fraction.
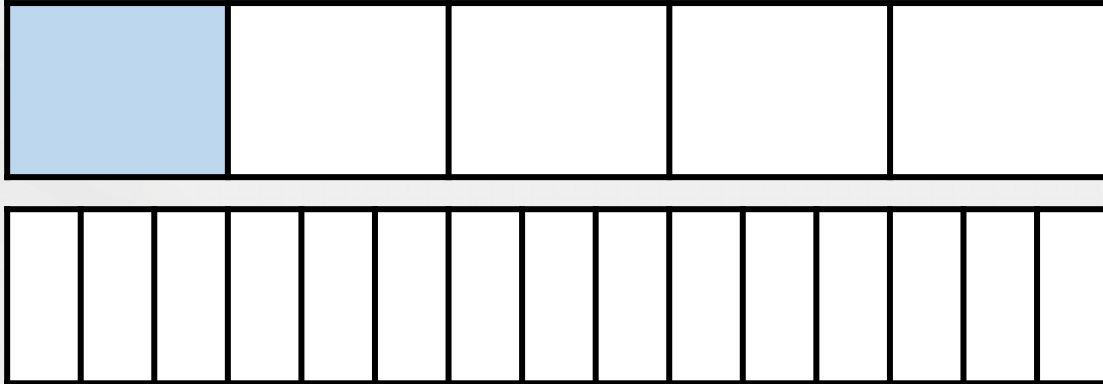
What is the fraction in the first diagram?

Complete the diagram to show the equivalent fraction.
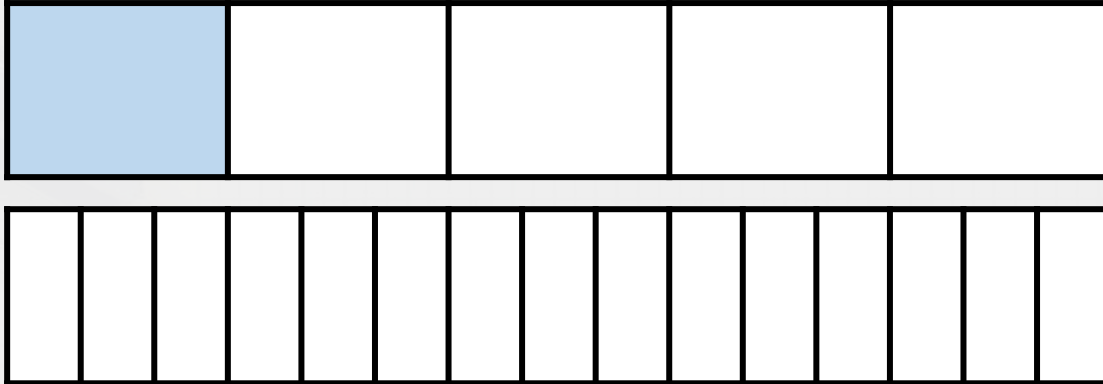
What is the fraction in the first diagram? $\dfrac{1}{5}$

Complete the diagram to show the equivalent fraction.
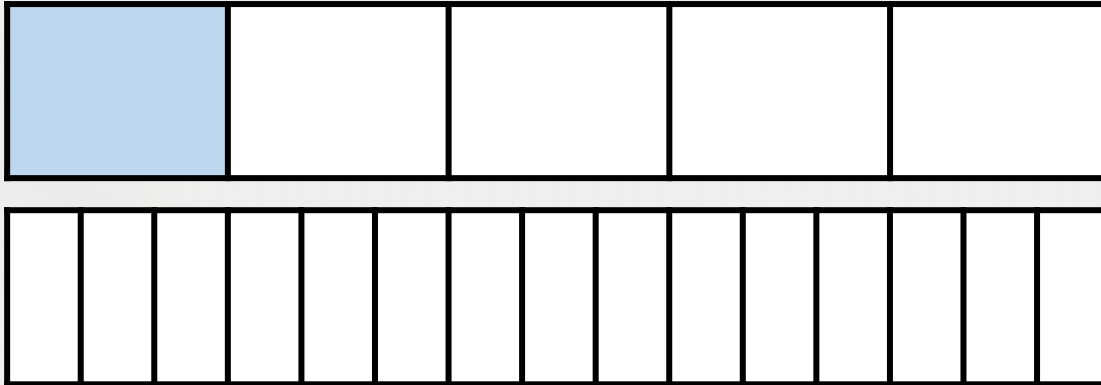
What is the fraction in the first diagram? $\dfrac{1}{5}$

Now work out the denominator for the second diagram.

Complete the diagram to show the equivalent fraction.
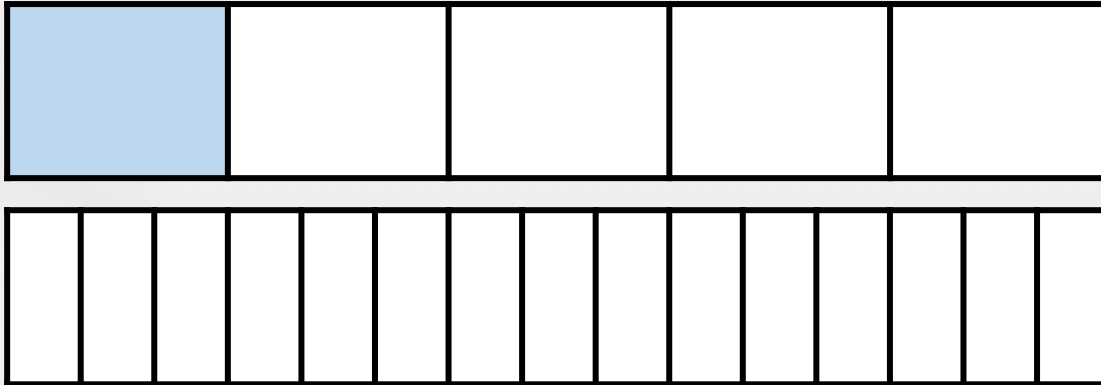
What is the fraction in the first diagram? $\frac{1}{5}$

Now work out the denominator for the second diagram. $\frac{}{15}$

Discuss/think- How can we find the denominator?

Complete the diagram to show the equivalent fraction.

$\frac{1}{5}$
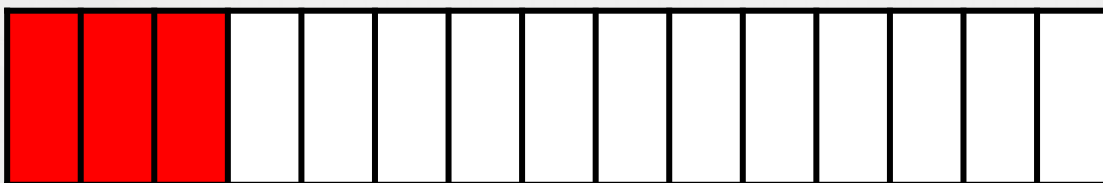
$\frac{3}{15}$

What is the fraction in the first diagram? $\frac{1}{5}$

Now work out the denominator for the second diagram. $\frac{}{15}$

Discuss/think- How can we find the denominator?
Because the shapes are the same size. We can colour in the same amount. Now count
how many sections are coloured in. This is your numerator. 3

Using your knowledge of multiples how many equivalent fractions can you create?

Write a fraction which is equivalent to $\frac{1}{6}$.

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

Don't forget the golden rule:

What you multiply the numerator by you multiply the denominator by.

$$\frac{1 \times \boxed{3}}{6 \times \boxed{3}} = \frac{3}{18}$$

Write a fraction which is equivalent to $\frac{1}{6}$.

Various answers, for example:

$$\frac{2}{12} \quad \frac{3}{18} \quad \frac{4}{24} \quad \frac{5}{30} \quad \frac{6}{36}$$

Now lets try looking at some equivalent fractions using our knowledge of multiplication.

$$\frac{1 \times \boxed{}}{7 \times \boxed{}} = \frac{4}{28}$$

What have the numerator and denominator been multiplied by to make the equivalent fraction?

What have the numerator and denominator been multiplied by to make the equivalent fraction?

$$\frac{1}{7} \quad \begin{array}{c} \times \boxed{\textbf{4}} \\ \times \boxed{\textbf{4}} \end{array} = \frac{4}{28}$$

Circle the fractions which are equivalent to $\frac{1}{4}$.

$$\frac{4}{16}$$ $$\frac{4}{8}$$ $$\frac{2}{8}$$

$$\frac{2}{5}$$ $$\frac{3}{12}$$

How could we work this one out???????

Using our knowledge of multiples …..of course.

Circle the fractions which are equivalent to $\frac{1}{4}$.

$$\frac{4}{16} \qquad \frac{4}{8} \qquad \frac{2}{8} \qquad \frac{3}{12} \qquad \frac{2}{5}$$

$$\frac{1 \quad \text{x} \quad \boxed{4}}{4 \quad \text{x} \quad \boxed{4}} = \frac{4}{16}$$

Try this with each fraction.

Don't forget the golden rule:

What you multiply the numerator by you multiply the denominator by.

Remember it might not always be 4

Circle the fractions which are equivalent to $\frac{1}{4}$.

$$\frac{4}{16}$$

$$\frac{4}{8}$$
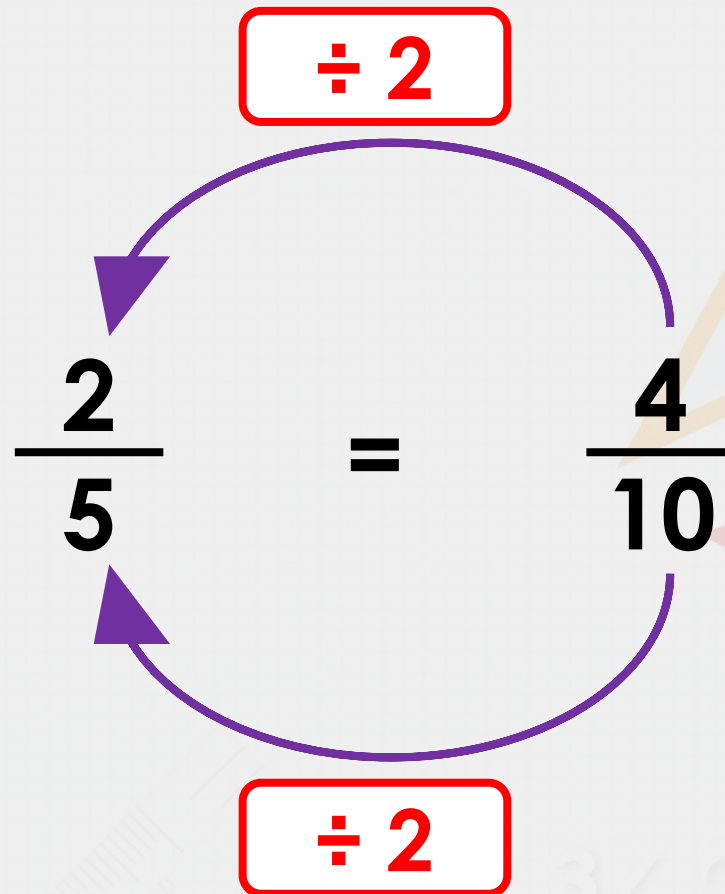
$$\frac{2}{8}$$

$$\frac{2}{5}$$

$$\frac{3}{12}$$

Fill in the missing divisor.

$$\div\ ?$$

$$\frac{2}{5} = \frac{4}{10}$$

$$\div\ ?$$

Y5

Fill in the missing divisor.

$$\div 2$$

$$\frac{2}{5} \quad = \quad \frac{4}{10}$$

$$\div 2$$

Match the equivalent fractions.

$$\frac{2}{5} \qquad\qquad \frac{9}{99}$$

$$\frac{1}{11} \qquad\qquad \frac{2}{3}$$

$$\frac{6}{9} \qquad\qquad \frac{6}{15}$$

Match the equivalent fractions.

$$\frac{2}{5} \qquad\qquad \frac{9}{99}$$

$$\frac{1}{11} \qquad\qquad \frac{2}{3}$$

$$\frac{6}{9} \qquad\qquad \frac{6}{15}$$

Now try these: This is submitted work so please send me a picture of your workings.

Equivalent Fractions

Examples:

1. $\frac{4}{6} = \frac{8}{12}$ ×2 / ×2

2. $\frac{2}{3} = \frac{10}{15}$ ÷5 / ÷5

Find the missing values in the following equivalent fractions.
Show your working as demonstrated above.

$$\frac{1}{6} = \frac{\boxed{}}{18} \qquad \frac{2}{4} = \frac{\boxed{}}{16} \qquad \frac{4}{\boxed{}} = \frac{12}{15} \qquad \frac{2}{3} = \frac{6}{\boxed{}}$$