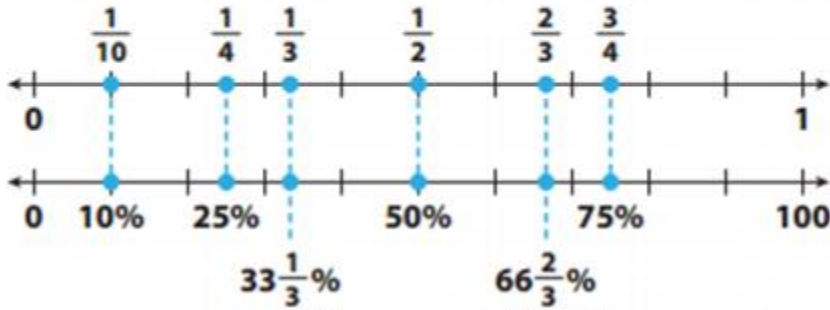


I can write a ratio as a percent.

Vocabulary: Percent- a ratio that compares a number to 100. The symbol % is used to show a percent. Percent means "per 100".

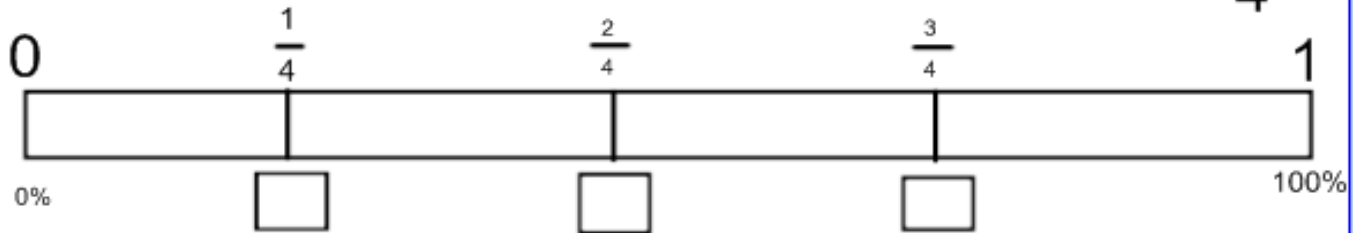
You can use certain *benchmark* percents to write other percents and to estimate fractions.



You can also use a percent bar model to show a ratio as a fraction and to find an equivalent percent.

To find the equivalent percent for $\frac{1}{4}$

Draw a model to represent 100 and divide it into fourths. Color in $\frac{1}{4}$



$\frac{1}{4}$ of 100 is 25, so $\frac{1}{4}$ of 100% is _____

Glue this into your notebook....

The free-throw ratios for three basketball players are shown.

Player 1: $\frac{17}{25}$

Player 2: $\frac{33}{50}$

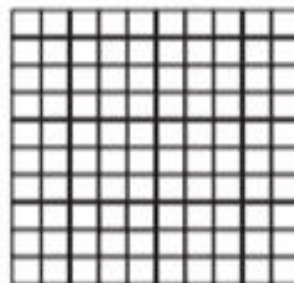
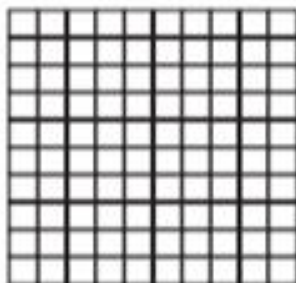
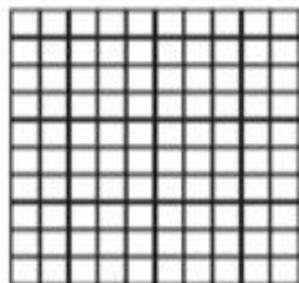
Player 3: $\frac{15}{20}$

- A** Rewrite each ratio as a number compared to 100. Then shade the grid to represent the free-throw ratio.

Player 1: $\frac{17}{25} = \frac{\boxed{}}{100}$

Player 2: $\frac{33}{50} = \frac{\boxed{}}{100}$

Player 3: $\frac{15}{20} = \frac{\boxed{}}{100}$



- B** Which player has the greatest free-throw ratio? _____

How is this shown on the grids? _____

- C** Use a percent to describe each player's free-throw ratio. Write the percents in order from least to greatest.

A Find an equivalent percent for $\frac{3}{10}$.

STEP 1 Write $\frac{3}{10}$ as a multiple of a benchmark fraction.

$$\frac{3}{10} = 3 \cdot$$

STEP 2 Find an equivalent percent for $\frac{1}{10}$.

$$\frac{1}{10} =$$

STEP 3 Multiply.

$$\frac{3}{10} = 3 \cdot \frac{1}{10} = 3 \cdot \underline{\hspace{1cm}}\% = \underline{\hspace{1cm}}\%$$

B 76% of the students at a middle school bring their own lunch.
About what fraction of the students bring their own lunch?

STEP 1 Note that 76% is close to the benchmark 75%.

STEP 2 Find a fraction equivalent for 75%:

$$75\% = \frac{3}{4}$$

About $\frac{3}{4}$ of the students bring their own lunch.

Let's do these together...

YOUR TURN

Use a benchmark to find an equivalent percent for each fraction.

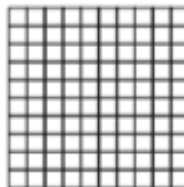
2. $\frac{9}{10}$ _____ 3. $\frac{2}{5}$ _____

4. 64% of the animals at an animal shelter are dogs. About what fraction of the animals at the shelter are dogs?

Practice these problems on your own.

1. Shade the grid to represent the ratio $\frac{9}{25}$. Then find a percent equivalent to the given ratio. (Explore Activity 1)

$$\frac{9 \times \boxed{}}{25 \times \boxed{}} = \frac{\boxed{}}{100} = \underline{\hspace{2cm}}$$



2. Use the percent bar model to find the missing percent. (Explore Activity 2)



Identify a benchmark you can use to find an equivalent percent for each ratio. Then find the equivalent percent. (Example 1)

3. $\frac{6}{10}$ Benchmark: $\frac{1}{\boxed{}}$

4. $\frac{2}{4}$ Benchmark: $\frac{\boxed{}}{4}$

5. $\frac{4}{5}$ Benchmark: $\frac{\boxed{}}{5}$

6. 41% of the students at an art college want to be graphic designers. About what fraction of the students want to be graphic designers? (Example 1)



ESSENTIAL QUESTION CHECK-IN

7. How do you write a ratio as a percent?
