

6.2

Comparing & Ordering Fractions, Decimals, & Percents

WARM UP

1) Match the decimal with its equivalent percent.

I) 0.42

II) 4.02

III) 0.042

IV) 0.0402

a) 4.02%

b) 42%

c) 4.2%

d) 402%

2) Write three different decimals that are between 10% and 20%.

WARM UP

3) Which one does not belong with the other three?

Explain your reasoning.

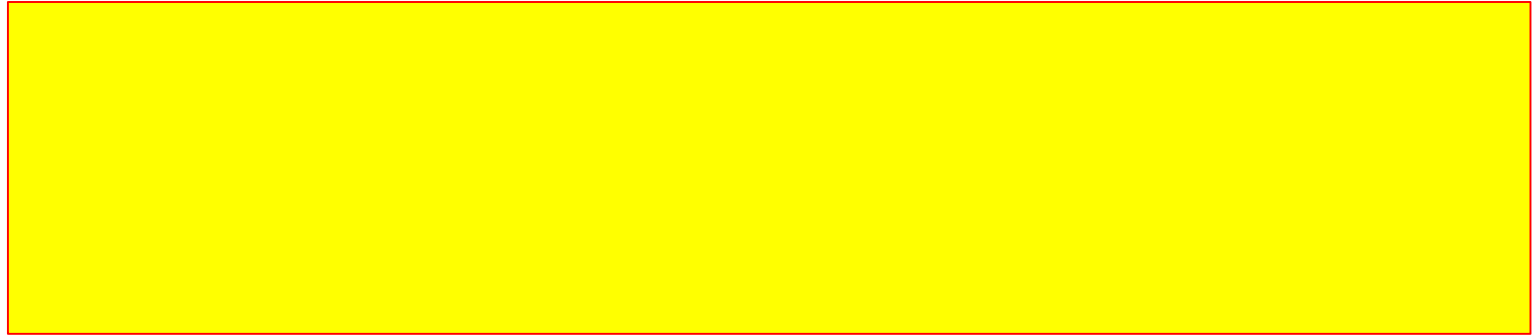
70%

0.07

0.7

$\frac{7}{10}$

THE KEY TO COMPARING:



- You need to remember to change all fractions and percents to _____.
- After you have converted them to _____, you will have no problem ordering them :)

COMPARING FRACTIONS, DECIMALS, AND PERCENTS

Use the symbols $<$, $>$, or $=$ to compare the following:

$$a) \quad 16\% \quad \underline{\hspace{1cm}} \quad \frac{3}{20}$$

$$b) \quad 79\% \quad \underline{\hspace{1cm}} \quad 0.08$$

$$c) \quad 25\% \quad \underline{\hspace{1cm}} \quad \frac{7}{25}$$

$$d) \quad 0.49 \quad \underline{\hspace{1cm}} \quad 94$$

Example: Order from LEAST to GREATEST.

$$0.35, 0.3, \frac{2}{5}, 0.45, 0.5$$

Convert all fractions into decimals!

Line up the decimals!

Even the playing field by plugging in place holding zeros.

Compare the numbers from left to right!

Put back in original form...

ORDERING FRACTIONS, DECIMALS, AND PERCENTS

e) Order the following from least to greatest.

$$0.5, \frac{2}{3}, 0.23, 5\%$$

ORDERING FRACTIONS, DECIMALS, AND PERCENTS

f) Order the following from least to greatest.

$$82\%, \frac{4}{8}, 0.26, 77\%, \frac{2}{3}$$

REAL LIFE APPLICATION

- g) You, your sister, and a friend each take the same number of shots at a soccer goal. You make 72% of your shots, your sister makes $\frac{19}{25}$ of her shots, and your friend makes 0.67 of his shots. Who made the fewest shots?

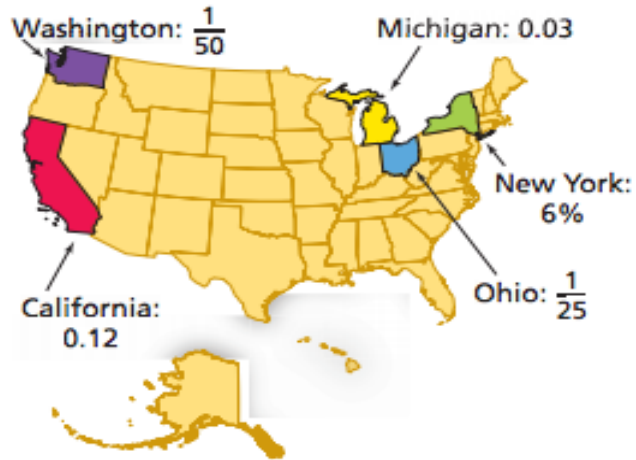
REAL LIFE APPLICATION

- h) You make 75% of your shots, your sister makes $\frac{13}{20}$ of her shots, and your friend makes 0.7 of his shots. Who made the most shots?

REAL LIFE APPLICATION

The map shows the portions of the U.S. population that live in five states.

List the five states in order by population from least to greatest.



Michigan:

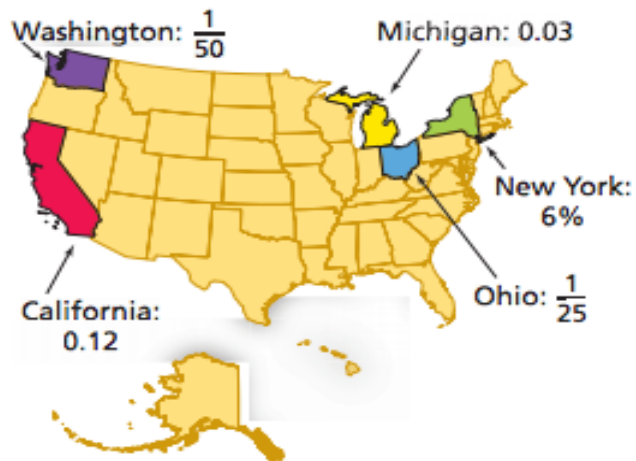
New York:

Washington:

California:

Ohio:

REAL LIFE APPLICATION



The portion of the U.S. population that lives in Texas is $\frac{2}{25}$. The portion that lives in Illinois is 0.042. Reorder the states in the previous problem to include Texas and Illinois