

6.2 Comparing and Ordering Fractions, Decimals, and Percents

EQ: How do we compare and order fractions, decimals and percents?

When comparing and ordering fractions, write the numbers as ALL fractions (with common denominators), ALL decimals, **OR ALL percents!

BE SURE TO USE your notes from 6.1 to help you **CONVERT** the numbers to ONE TYPE, then solve.

EXAMPLE 1 Comparing Fractions, Decimals, and Percents

a. Which is greater, $\frac{3}{20}$ or 16%?

Write $\frac{3}{20}$ as a percent: $\frac{3}{20} \times \frac{100}{1} = \frac{300}{20}$

$$\frac{300}{20} \div \frac{20}{20} = \frac{15}{1} = 15\%$$

∴ 15% is less than 16%. So, 16% is GREATER.

b. Which is greater, 79% or 0.08?

You Can: Write 79% as a decimal: $79\% = 79.\% = 0.79$

∴ 0.79 is greater than 0.08. So, 79% is the greater number.

OR You Can: Write 0.08 as a percent: $0.08 = 8\%$

∴ 79% is greater than 8%. So, 79% is the greater number.

On Your Own

- Which is greater, 25% or $\frac{7}{25}$?
- Which is greater, 0.49 or 94%?

EXAMPLE 2 Real-Life Application

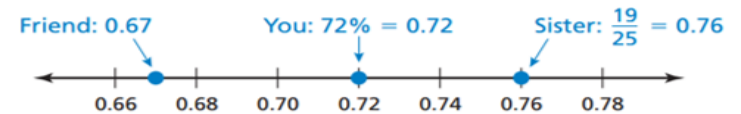
You, your sister, and a friend each take the same number of shots at a soccer goal. You make 72% of your shots, your sister makes $\frac{19}{25}$ of her shots, and your friend makes 0.67 of his shots. Who made the fewest shots?

Write 72% and $\frac{19}{25}$ as decimals.

You: $72\% = 72.\% = 0.72$

Sister: $\frac{19}{25} = 19 \div 25 = 0.76$

Graph the decimals on a number line.



∴ 0.67 is the least number. So, your friend made the fewest shots.

On Your Own

- 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?

6.2 Comparing and Ordering Fractions, Decimals, and Percents

EQ: _____

** _____

BE SURE TO USE your notes from 6.1 to help you **CONVERT** the numbers to ONE TYPE, then solve.

EXAMPLE 1 Comparing Fractions, Decimals, and Percents

a. Which is greater, $\frac{3}{20}$ or 16%?

Write _____ as a percent: _____ x _____ = _____

_____ ÷ _____ = _____ = _____%

∴ _____% is less than _____%. So, _____% is GREATER.

b. Which is greater, 79% or 0.08?

You Can: Write _____ as a decimal: _____ = _____ = _____

∴ _____ is greater than _____. So, _____ is the greater number.

OR You Can: Write _____ as a percent: _____ = _____

∴ _____ is greater than _____. So, _____ is the greater number.

On Your Own

- Which is greater, 25% or $\frac{7}{25}$?
- Which is greater, 0.49 or 94%?

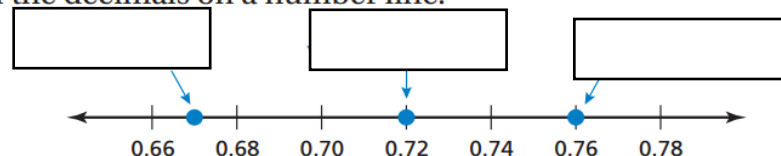
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You: = = 0.72 Sister: $\frac{19}{25}$ = =

Graph the decimals on a number line.



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On Your Own

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