

Key

Vocabulary
 Percent - a ratio that compares a number to 100.
 Part (is) - a small section of the item
 Whole (of) - the entire item

Finding the Part
 Option 1: Scale (if possible)
 Option 2: Cross-Products (Cross Multiply and Divide)

is
—
of

* scaling doesn't work

Guided Practice
 Find the percent of each number.

1.) 32% of 60

~~32~~ / ~~100~~ = ~~8~~ / ~~25~~ = ~~8~~ / ~~60~~

doesn't work

(cross-products)

32 / 100 = 19.20 / 60

$32 \times 60 = 1920$
 $1920 \div 100 = 19.20$

2.) 0.55% of 220

(cross-products)

0.55 / 100 = 1.21 / 220

$0.55 \times 200 = 121$
 $121 \div 100 = 1.21$

3.) 275% of 4

(cross-products)

275 / 100 = 11.00 / 4

$275 \times 4 = 1100$
 $1100 \div 100 = 11.00$

scaling could also work

4.) Troy wants to buy a jersey of his favorite MLS team. The jersey is 30% off the original price. If the original price of the jersey is \$35, what is the amount Troy will save?

* Don't use is with word problems! Think about part / whole!

save 30 / orig. 100 = 10.50 / 35

$30 \times 35 = 1050$
 $1050 \div 100 = 10.50$

\$10.50

5.) **EXTEND YOUR THINKING** - Emily had \$25 to buy a gift for her friend. She decided to buy a shirt for \$24. The sales tax is 7%. Does she have enough money? Explain your reasoning.

tax 7 / total 100 = 1.68 / 24

$7 \times 24 = 168$
 $168 \div 100 = 1.68$

shirt \$ 24.00
 tax \$ 1.68
 total \$ 25.68

NO, Emily doesn't have enough money. She has \$25 but the total would be \$25.68.

Partner Talk

If 8% of 575 students choose chicken as their favorite meal, how many students choose chicken?

chicken 8 / total 100 = 46 / 575

$8 \times 575 = 4600$
 $4600 \div 100 = 46.00$

46 students chose chicken.

Building on the Essential Question - How do you find a percent of a number?

- #1 scale (if possible)
- #2 cross-products (cross-multiply + divide)

Rate yourself

Are you ready to move on? Shade in your response.

YES ? NO