

Percent Problems - Finding the Part or Whole (6.RP.3c)

Key

Vocabulary

Percent - a ratio that compares a number to 100.

Part (is) - a small section of the item

Whole (of) - the entire item

is
of

Finding the Whole

Option 1: Scale (if possible)

Option 2: Cross-Products (Cross Multiply and Divide)

Label the 3 numbers in a percent problem.

(part, whole, percent)

30% percent of 80 whole is 24. part

Guided Practice

Find the Part or Whole.

whole

part

1.) 20% of is 8

(scale)

$$\frac{20}{100} \times 5 = 8$$

40

whole

2.) 20% of 60 is

$$\frac{20}{100} \times 60 = 12$$

3.) 35 is 50% of what number?

(cross-products)

$$\frac{50}{100} = \frac{35}{x}$$

70

$$35 \times 100 = 3500$$

$$3500 \div 50 = 70$$

4.) 7% of 140 is what?

(cross-products)

$$\frac{7}{100} \times 140 = 9.80$$

$$7 \times 140 = 980$$

$$980 \div 100 = 9.80$$

5.) Kai calculates that he spends 15% of a school day in science class. If he spends 75 minutes in science class, how many minutes does Kai spend in school?

science
total

$$\frac{15}{100} \times 5 = 75$$

500

500 minutes

6.) If Marisol scored a 96% on an English test. There were 50 questions on the test. How many did Marisol answer correctly?

correctly
total

$$\frac{96}{100} \times 50 = 48$$

48 questions

7.) **EXTEND YOUR THINKING** - Torri had \$20 to buy a birthday present for her dad. She decided to buy a DVD for \$18. The sales tax is 7%. Does she have enough money? Explain your reasoning.

$$\frac{7}{100} \times 18 = 1.26$$

$$7 \times 18 = 126$$

$$126 \div 100 = 1.26$$

$$\begin{array}{r} \text{(dvd)} \quad 18.00 \\ \text{(tax)} \quad + 1.26 \\ \hline 19.26 \end{array}$$

yes, she has enough money. She has \$20 and the dvd and tax together are only \$19.26.

Rate Yourself - Are you ready to move on? Shade the section that applies.

YES ? NO