

1-26-18

Aim: SWBAT do their best on the quiz.

HW: None

Do Now: Pencil and calculator

Ratios and Proportions

Solve algebraically using a proportion. Write your answer in a complete sentence.

1. If 2 liters of fruit juice cost \$3.98, how much do 5 liters of the fruit juice cost?

$$\frac{\$3.98}{2L} = \frac{\$x}{5L} \quad \frac{2x}{2} = \frac{19.9}{2} \quad \text{It will cost } \$9.95 \text{ for 5 Liters.}$$

$$x = 9.95$$

2. If 64 feet of rope weighs 20 pounds, how much will 80 feet of the same rope weigh?

$$\frac{64 \text{ feet}}{20 \text{ pounds}} = \frac{80 \text{ feet}}{x \text{ pounds}} \quad \frac{64x}{64} = \frac{1600}{64} \quad \text{Eighty feet of rope weighs 25 pounds.}$$

$$x = 25$$

3. If a 10-pound turkey takes 4 hours to cook, how long will it take a 14-pound turkey to cook?

$$\frac{10 \text{ lbs}}{4 \text{ hrs}} = \frac{14 \text{ lbs}}{x \text{ hrs}} \quad \frac{10x}{10} = \frac{56}{10} \quad \text{A 14-lb turkey will cook in 5 hours 36 minutes.}$$

$$x = 5.6$$

4. In 5 hours of driving, Julie traveled 235 kilometers. If she travels at the same rate, how far will she drive in 11 hours?

$$\frac{235 \text{ km}}{5 \text{ hrs}} = \frac{x \text{ km}}{11 \text{ hrs}} \quad \frac{5x}{5} = \frac{2585}{5} \quad \text{She will drive 517 km.}$$

$$x = 517$$

5. Martha read 12 books in the last 8 weeks. At this rate, how many books will she read in 18 weeks?

$$\frac{12 \text{ books}}{8 \text{ weeks}} = \frac{x \text{ books}}{18 \text{ weeks}} \quad \frac{8x}{8} = \frac{216}{8} \quad \text{Martha will read 27 books in 18 weeks.}$$

$$x = 27$$

6. Pablo typed 410 words in 5 minutes. How many words per minute did he type?

$$\frac{410 \text{ words}}{5 \text{ min}} = \frac{x \text{ words}}{1 \text{ min}} \quad \frac{5x}{5} = \frac{410}{5} \quad \text{He can type 82 words per minute.}$$

$$x = 82$$

7. Evan paid \$1.12 for a dozen eggs. Determine the cost of 3 eggs.

$$\frac{\$1.12}{12 \text{ eggs}} = \frac{\$x}{3 \text{ eggs}} \quad \frac{12x}{12} = \frac{3.36}{12} \quad \text{It will cost } \$0.28 \text{ for 3 eggs.}$$

$$x = 0.28$$