

PERCENTS REVIEW

NAME Answer Key

1. Ryan took out a loan for \$1200. He paid 5% interest and paid it back in 4 months. How much interest did he pay? What was the total amount he paid?

$$1200 \times 0.05 \times \frac{1}{3} = 19.9999$$

$$\frac{4}{12} = \frac{1}{3}$$

round to \$20 interest

\$1220 total paid

2. Tommy painted a picture that was made of 50 squares. $\frac{1}{5}$ of the squares were blue, 30% were red, 5 squares were green, and the rest were yellow. How many squares were yellow?

Blue

$$\frac{1}{5} \cdot 50 = \frac{50}{5} = 10$$

Red

$$30\% \text{ of } 50$$

$$\frac{x}{50} = \frac{30}{100}$$

$$x = 15$$

Green
5

Yellow
50 - 10 - 15 - 5

20

20 squares are yellow

3. Will spent 90 minutes at the gym. 20% of the time, he was lifting weights. He spent $\frac{1}{3}$ of the time talking to his friends, and the rest of the time on the treadmill. How many minutes was he on the treadmill?

Weights

$$20\% \text{ of } 90$$

$$\frac{x}{90} = \frac{20}{100} \quad x = 18$$

talking

$$\frac{1}{3} \text{ of } 90$$

$$90 \div 3 = 30$$

treadmill

$$90 - 18 - 30 = 42$$

Will was on the treadmill for 42 minutes.

4. Aidan, Levi and Jackson were having a competition to see who could run the most laps. Aidan ran 25% more laps than Levi. Jackson ran 20% more than Aidan. If Aidan ran 40 laps, how many laps did they all run together?

Aidan is 25% more than Levi, or 125% of Levi

$$\frac{\text{Aidan}}{\text{Levi}} = \frac{40}{x} = \frac{125}{100}$$

$$x = 32$$

Jackson is 20% more than Aidan, or 120% of Aidan

$$\frac{\text{Jackson}}{\text{Aidan}} = \frac{x}{40} = \frac{120}{100} \quad x = 48$$

Levi = 32
Jackson = 48
Aidan = 40

Total = 120 laps

5. Main Street is decorated with a lot of lights! The bank used 30% more lights than the library.

The train station has 20% more lights than the bank. If the bank used 5850 lights, how many lights were used altogether?

Bank is 130% of library

$$\frac{\text{Bank}}{\text{Lib}} = \frac{5850}{x} = \frac{130}{100}$$

$$x = 4500$$

Train is 120% of bank

$$\frac{\text{Train}}{\text{Bank}} = \frac{x}{5850} = \frac{120}{100}$$

$$x = 7020$$

Bank = 5850
Library = 4500
Train = 7020

Total = 17,370 lights