

Name: _____

Date: _____

Aim: How can we practice solving percent word problems?

Do Now: In the Chess club, Joey won 70% of the games he played. If he played 90 games during the club, how many did he lose? $100 - 70 = 30\%$

part = % \cdot whole

$n = 30\% \cdot 90$

$n = (0.30)(90)$

$n = 27$ games LOST

1. On a 45 question test, Hal missed 8 questions. Rounding to the nearest whole percent, what grade did Hal get on the test? answered 37 correctly

$$\frac{37}{45} = \frac{n\% \cdot 45}{45}$$

$$0.8222... = n\%$$

82%

2. There are 12 girls and 16 boys in a class. To the nearest whole percent, what percent of the class is girls?

$$\frac{12}{28} = \frac{n\% \cdot 28}{28}$$

$$0.4285... = n\%$$

43%

3. At lunch, 13 kids chose a bagel with cream cheese and 14 kids chose pizza. To the nearest whole percent, what percent of the class chose a bagel with cream cheese?

$$\frac{13}{27} = \frac{n\% \cdot 27}{27}$$

$$0.48148... = n\%$$

48%

4. Out of the 3,450 people in a town, 690 of them did not vote. What percentage of people voted?

$$3450 - 690 = 2760 \text{ voted}$$

$$\frac{2760}{3450} = \frac{n\% \cdot 3450}{3450}$$

$$0.8 = n\%$$

80%

5. Jan got 34 out of the 40 questions on the test correct. What grade did she get?

$$\frac{34}{40} = \frac{n\% \cdot 40}{40}$$

$$0.85 = n\%$$

85%

6. On a different test, Jan missed 8 questions out of the 40 questions. What grade did she get?

$$\frac{32}{40} = \frac{n\% \cdot 40}{40}$$

$$0.8 = n\%$$

80%

7. 24 students in a class took an algebra test. If 18 students passed the test, what percent do not pass?

$$\frac{6}{24} = \frac{n\% \cdot 24}{24}$$

$$0.25 = n\%$$

$$\boxed{25\%}$$

8. The sixth-graders at Karin's school got to choose between a field trip to a museum and a field trip to a factory. 72 sixth-graders picked the museum. If there are 80 sixth-graders in all at Karin's school, what percentage of the sixth-graders picked the museum?

$$\frac{72}{80} = \frac{n\% \cdot 80}{80}$$

$$0.9 = n\%$$

$$\boxed{90\%}$$

9. Josie had both chocolate cake and coconut cake at her birthday party. 5 people picked chocolate cake and 45 people picked coconut cake. What percentage of the people at the party picked chocolate cake?

$$\frac{5}{50} = \frac{n\% \cdot 50}{50}$$

$$0.1 = n\%$$

$$\boxed{10\%}$$

10. To celebrate the first day of school, Jane brought in a tray of caramel brownies and walnut brownies. She brought 42 caramel brownies and 28 walnut brownies. What percentage of the brownies were caramel?

$$\frac{42}{70} = \frac{n\% \cdot 70}{70}$$

$$0.6 = n\%$$

$$\boxed{60\%}$$

11. A salesperson receives a 2.5% commission on sales. What commission does the salesperson receive for \$8000 in sales?

$$n = 2.5\% \cdot 8000$$

$$n = (0.025)(8000)$$

$$\boxed{n = \$200}$$

12. Your school raised 125% of its fundraising goal. The school raised \$6750. What was the goal?

$$6750 = 125\% \cdot n$$

$$\frac{6750}{1.25} = \frac{1.25n}{1.25}$$

$$\boxed{5400 = n}$$

13. In a school that totals 780 students, only 25% take the bus to school. How many students take the bus to school?

$$n = 25\% \cdot 780$$

$$n = (0.25)(780)$$

$$\boxed{n = 195 \text{ students}}$$