

Name _____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Solve the proportion.

1) $\frac{x}{5} = \frac{24}{30}$ 1) _____
A) 6 B) 5 C) 3 D) 4

2) $\frac{27}{9} = \frac{18}{f}$ 2) _____
A) 9 B) 6 C) 18 D) 3

3) $\frac{24}{120} = \frac{-9}{y}$ 3) _____
A) 45 B) 5 C) -5 D) -45

Solve the proportion. Write the solution in decimal form when applicable.

4) $\frac{0.27}{t} = \frac{0.4}{0.15}$ 4) _____
A) 0.10125 B) 0.72 C) 0.072 D) 2.7

5) $\frac{1.2}{m} = \frac{0.2}{5}$ 5) _____
A) 30.5 B) 26 C) 30 D) 68

6) $\frac{m}{5.5} = \frac{1.84}{4.4}$ 6) _____
A) 5.4 B) 2.3 C) 5.5 D) 1.7

Use a proportion to solve the application.

7) Jim can drive 192 miles in 4 hours. How many hours will it take him to drive 1296 miles? 7) _____
A) 768 hours B) 27 hours C) 37 hours D) 54 hours

8) If a computer prints 159 lines in 5 seconds, how many lines can it print per minute? 8) _____
A) 1918 lines B) 1908 lines C) 1913 lines D) 954 lines

9) According to a recent study, 2.95 million households in one American city have pets. Out of every 100 people, 52 have more than one pet. How many households own more than one pet? 9) _____
A) 1,534,000 people B) 1,433,676 people
C) 1,545,965 people D) 153,400 people

Write the percent as a decimal.

10) 11.3% 10) _____
A) 0.0113 B) 11.3 C) 1.13 D) 0.113

- 11) 22% 11) _____
 A) 2.2 B) 22.0 C) 0.022 D) 0.22
- 12) 268% 12) _____
 A) 26.8 B) 2.68 C) 268 D) 0.268

Write the fraction or mixed number as a percent. Write the percent as a simplified fraction or mixed number.

- 13) $5\frac{1}{2}$ 13) _____
 A) 550% B) 55% C) 300% D) $5\frac{1}{2}\%$

Write the fraction or mixed number as a percent. Write the percent using decimals.

- 14) $\frac{3}{16}$ 14) _____
 A) 0.1875% B) 1.875% C) 18.75% D) 0.01875%

Write the decimal as a percent.

- 15) 0.086 15) _____
 A) 86% B) 8.6% C) 0.86% D) 0.086%
- 16) 0.33 16) _____
 A) 0.033% B) 330% C) 3.3% D) 33%
- 17) 5 17) _____
 A) 0.5% B) 0.05% C) 50% D) 500%

Write the fraction or mixed number as a percent. Write the percent using decimals.

- 18) $\frac{35}{100}$ 18) _____
 A) 0.35% B) 35% C) 350% D) 3.5%

Write the fraction as a percent rounded to the nearest tenth, if necessary.

- 19) $\frac{1}{4}$ 19) _____
 A) 2.5% B) 40% C) 62.5% D) 25%

Use an equation to solve the percent problem.

- 20) 25% of 12 is what number? 20) _____
 A) 48 B) 4.8 C) 3 D) 30
- 21) What number is 53% of 90? 21) _____
 A) 47,700 B) 477 C) 4770 D) 47.7
- 22) What percent of 110 is 23.1? 22) _____
 A) 0.21% B) 2.1% C) 21% D) 210%

- 23) What number is 42% of 38? 23) _____
 A) 1.596 B) 159.6 C) 1596 D) 15.96
- 24) 10% of what number is 97? 24) _____
 A) 97 B) 970 C) 9700 D) 9.7
- 25) 18 is what percent of 50? 25) _____
 A) 3600% B) 36% C) 3.6% D) 0.36%
- 26) 105 is what percent of 70? 26) _____
 A) 1500% B) 1.5% C) 150% D) 15%

Translate the word statement into a percent proportion. Do not solve.

- 27) 43 is 51% of what number? 27) _____
 A) $\frac{43}{b} = \frac{51}{100}$ B) $\frac{51}{43} = \frac{p}{100}$ C) $\frac{a}{43} = \frac{51}{100}$ D) $\frac{51}{b} = \frac{43}{100}$
- 28) What number is 35% of 63 ? 28) _____
 A) $\frac{a}{35} = \frac{100}{63}$ B) $\frac{a}{63} = \frac{35}{100}$ C) $\frac{35}{63} = \frac{p}{100}$ D) $\frac{63}{b} = \frac{35}{100}$
- 29) What percent of 76 is 16? 29) _____
 A) $\frac{76}{b} = \frac{16}{100}$ B) $\frac{76}{16} = \frac{p}{100}$ C) $\frac{16}{76} = \frac{p}{100}$ D) $\frac{a}{76} = \frac{16}{100}$
- 30) 28 is 129% of what number? 30) _____
 A) $\frac{a}{28} = \frac{129}{100}$ B) $\frac{129}{b} = \frac{28}{100}$ C) $\frac{129}{28} = \frac{p}{100}$ D) $\frac{28}{b} = \frac{129}{100}$

Use percents, percent equations, and/or percent proportions to solve the application.

- 31) A basketball player made 332 field goal attempts in one season. If this was 51.7% of his attempts, how many field goals did he attempt? 31) _____
 A) 1102 field goals B) 642 field goals
 C) 172 field goals D) 307 field goals
- 32) A company's profit amounted to 5% of its sales. If the profits were \$2 million, then what were the company's sales? 32) _____
 A) \$40 million B) \$41 million C) \$42 million D) \$38 million
- 33) A community college raises its tuition from \$366 per course to \$393 per course. What is the percent increase? Round to the nearest tenth of a percent, if necessary. 33) _____
 A) 93.1% B) 7.4% C) 92.6% D) 6.9%