

$$\frac{\text{PART}}{\text{WHOLE}} = \frac{\text{PERCENT}}{100}$$

## M7 Chapter 2 - Percents practice test

IF YOU HAVE ALL OF SOMETHING YOU HAVE 100%

1. What is 35% of 60?

$$0.35(60) = 21$$

$$35\% = 0.35$$

Show your work

$$\frac{x}{60} = \frac{35}{100}$$

$$\frac{60(35)}{100} = \frac{2100}{100} = 21$$

Correction notes

2. What is 112% of 50?

$$112\% = 1.12$$

$$100\% \rightarrow 1.12(50) = 56$$

Show your work

$$\frac{x}{50} = \frac{112}{100}$$

$$\frac{50(112)}{100} = \frac{5600}{100} = 56$$

Correction notes

3. 3% of 120 is what number?

$$3\% = 0.03$$

$$0.03(120) = 3.6$$

$$\frac{x}{120} = \frac{3}{100} = \frac{3(120)}{100} = \frac{360}{100} = 3.6$$

Show your work

$$30\% = 0.3$$

Correction notes

$$10\% \text{ of } 120 = 12$$

4. Kaitlyn made 85% of the 60 free throws she attempted. How many free throws did Kaitlyn make?

Show your work

$$0.85(60) = 51$$

$$85\% = 0.85$$

$$\frac{x}{60} = \frac{85}{100} = \frac{60(85)}{100} = \frac{5100}{100} = 51$$

Correction notes

5. 6 is what percent of 96?

Show your work

$$\frac{6}{96} = \frac{x}{100} = \frac{6(100)}{96} = \frac{600}{96} = 6.25$$

$$0.0625(96) = 6$$

Correction notes

$$12 \div 4 = 3$$

$$4 \times 3 = 12$$

6. What percent of 70 is 14?

Show your work

$$\frac{14}{70} = \frac{x}{100} = \frac{14(100)}{70} = \frac{1400}{70} = 20$$

$$0.20(70) = 14$$

Correction notes

$$\frac{\quad}{\quad} = \frac{\quad}{100}$$

7. Wyatt bought a pair of shoes for \$72. The next week he noticed that the price for the same pair of shoes was now \$87. Find the percent of change.

Show your work

① FIND THE DIFFERENCE  $87 - 72 = 15$

②  $\frac{15}{72} = 20.8$

20.8% INCREASE

Correction notes

8. Maria has lunch at a restaurant. If her bill was \$12.25 and Maria wants to leave a 20% tip, what is a reasonable estimate for the amount she should leave for the tip?

A. \$1.30 B. \$2.00 C. \$2.45 D. \$2.80

Show your work

$\$12.25$  20%

$10\% \text{ of } 12.00 = 1.20$

$20\% \text{ of } 12.00 = 2.40$

Correction notes

9. Find the simple interest paid to the nearest cent for the following principal, interest rate, and time.  
\$390, 3%, 5 years

Show your work

$P \times R \times T$

$390 \times 0.03 \times 5 = \$58.50$

Correction notes

10. Eber bought a new pair of baseball cleats for \$64.95. The sales tax is 5.5%. What is the total cost that Eber will pay?

Show your work

$\$64.95(0.055) = 3.57225 = \$3.57 \text{ TAX}$

$\$64.95 + \$3.57 = \$68.52$

CLEATS + TAX = TOTAL

Correction notes

COST OF CLEATS 100%

5.5% TAX

$\$64.95(1.055) = 68.52225$

$\$68.52$

11. Mr. Jamison bought a toaster oven that was originally priced at \$89. He received a 20% discount. The sales tax is 8% on the discounted price. What is the total Mr. Jamison paid for the toaster oven?

Show your work

$\$89(0.20) = \$17.80 \leftarrow \text{DISCOUNT (SAVINGS)}$

$\$89 - \$17.80 = \$71.20 \leftarrow \text{DISCOUNTED PRICE}$

$\$71.20(0.08) = 5.696 = \$5.70$

$\$71.20 + \$5.70 = \$76.90$

Correction notes

YOU PAY 80%

$\$89(0.8) = \$71.20$

$1.08 = 108\%$

$\$71.20(1.08) = 76.896$

TOASTER + TAX

$\$76.90$

12. Winona got her hair cut for \$21. The tax was 7% and she left a 15% tip for the hair stylist. What is the total amount of money Winona paid?

Show your work

$\$21(0.07) = \$1.47 \leftarrow \text{TAX}$

$\$21(0.15) = \$3.15 \leftarrow \text{TIP}$

$21.00$

$1.47$

$+ 3.15$

$\$25.62$

Correction notes