

## M7 Chapter 2 - Percents practice test

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

$$\text{PART} = \text{WHOLE} (\text{PERCENT})$$

AS A DECIMAL

1. What is 35% of 60?

$\text{PART} = X$       $\%$       $\text{WHOLE}$   

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

Show your work

CHECK  
 $60(0.35) = 21$

Correction notes

$$\frac{2100}{100} = \frac{100X}{100}$$

$$21 = X$$

100 IS THE COEFFICIENT

2. What is 112% of 50?

$\text{WHOLE}$   

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

Show your work

$112\% = 1.12$

CHECK:  
 $50(1.12) = 56$

Correction notes

$$\frac{5600}{100} = \frac{100X}{100}$$

$$56 = X$$

3. 3% of 120 is what number?

$\text{WHOLE}$   
 $\text{PART}$   

$$\frac{100X}{120} = \frac{3}{100}$$

Show your work

$$\frac{360}{100} = \frac{100X}{100}$$

$$3.6 = X$$

Correction notes

CHECK:  $0.03(120) = 3.6$

4. Kaitlyn made 85% of the 60 free throws she attempted.

How many free throws did Kaitlyn make?

$\text{WHOLE}$   

$$\frac{100X}{60} = \frac{85}{100}$$

Show your work

$$\frac{5100}{100} = \frac{100X}{100}$$

$$51 = X$$

Correction notes

CHECK  $\frac{51}{60} = 0.85 = 85\%$

KAITLYN MADE 51 FREE THROWS

5. 6 is what percent of 96?

$\text{PART}$   
 $\text{WHOLE}$   

$$\frac{6}{96} = \frac{X}{100}$$

Show your work

$$\frac{96X}{96} = \frac{600}{96}$$

$$X = 6.25\%$$

Correction notes

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

$$\frac{6}{96} = 0.0625 = 6.25\%$$

6. What percent of 70 is 14?

Show your work

$\text{WHOLE}$   
 $\text{PART}$

$$\frac{14}{70} = 0.2 = 20\%$$

Correction notes

CHECK:  
 $70(0.2) = 14$

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  $87 - 72 = 15$     ③  $\frac{15}{72} = 0.208\bar{3}$   
 ② 72                    ④ INCREASE

Correction notes

20.83% INCREASE IN THE PRICE OF THE SHOES

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

$12.25 \rightarrow 10\% \text{ is } 1.225$     \$1.23  
 $20\% \rightarrow \$2.46$

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

PRINCIPLE (RATE)(TIME)  
 $\$390(0.03)(5)$   
 INTEREST PER YEAR  $\rightarrow \$11.70(5) = \$58.50$  TOTAL INTEREST

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

$\$64.95(0.055) = 3.81975$     0.055  
 $\$64.95 + \$3.82 = \$68.77$  TOTAL COST    \$3.82 TAX

Correction notes

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

$\$89(0.20) = \$17.80$  DISCOUNT  
 $\$89 - \$17.80 = \$71.20$  SALE PRICE OR DISCOUNTED PRICE  
 $\$71.20(0.08) = 5.696 = \$5.70$  TAX  
 $\$71.20 + \$5.70 = \$76.90$  TOTAL COST

Correction notes

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

$\$21(0.07) = \$1.47$  TAX    \$21.00  
 $\$21(0.15) = \$3.15$  TIP    1.47  
 $\$25.62$  FOR THE HAIRCUT WITH TAX AND TIP.    }  $21(0.22) = \$4.62$  TAX AND TIP

Correction notes