

M7 Chapter 2 - Percents practice test

<p>1. What is 35% of 60?</p> <p>Show your work</p> $35\% = 0.35$ $0.35(60) = 21$ <div style="text-align: center;"> $\frac{x}{60} = \frac{35}{100}$ </div> $35(60) = 100x$ $\frac{2100}{100} = \frac{100x}{100}$ $21 = 1x$	<p>Correction notes</p> <p style="text-align: right;">$4 \times 6 = 24$ $4 + 4 + 4 + 4 + 4 + 4 = 24$</p> <p style="text-align: center;">2 GROUPS OF 3 $\begin{matrix} + + + \\ + + + \end{matrix} 6$ $2 \times 3 = 6$</p>
<p>2. What is 112% of 50?</p> <p>Show your work</p> <p style="text-align: center;">MULTIPLE ↑</p> $112\% = 1.12$ $100\% + 12\%$ $1 + 0.12 = 1.12$ $1.12(50) = 56$	<p>Correction notes</p> $\frac{x}{50} = \frac{112}{100}$ $50(112) = 100x$ $\frac{5600}{100} = \frac{100x}{100}$ $56 = 1x$
<p>3. 3% of 120 is what number?</p> <p>Show your work</p> <div style="text-align: center;"> $\frac{x}{120} = \frac{3}{100}$ </div> $120(3) = 100x$ $\frac{360}{100} = \frac{100x}{100}$ $3.6 = x$	<p>Correction notes</p>
<p>4. Kaitlyn made 85% of the 60 free throws she attempted. How many free throws did Kaitlyn make?</p> <p>Show your work</p> $85\% = 0.85$ <p style="text-align: center;">MULTIPLY ↑</p> $0.85(60) = 51 \text{ FREE THROWS}$	<p>Correction notes</p> $\frac{x}{60} = \frac{85}{100}$ $60(85) = 100x$ $\frac{5100}{100} = \frac{100x}{100}$ $51 = x$
<p>5. 6 is what percent of 96?</p> <p>Show your work</p> <p style="text-align: center;">PART = PERCENT WHOLE</p> $\frac{6}{96} = 0.0625 = 6.25\%$ <p style="text-align: center;">HUNDRETHS ↓</p>	<p>Correction notes</p> $\frac{6}{96} = \frac{x}{100}$ $96x = 6(100)$ $\frac{96x}{96} = \frac{600}{96}$ $1x = 6.25$
<p>6. What percent of 70 is 14?</p> <p>Show your work</p> $\frac{14}{70} = 0.2 = 20\%$ $\frac{14}{70} = \frac{x}{100}$ $14(100) = 70x$ $\frac{1400}{70} = \frac{70x}{70}$ $20 = x$	<p>Correction notes</p>

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 CHANGE

② $\frac{\text{CHANGE}}{\text{ORIGINAL AMOUNT}}$

① $87 - 72 = 15$ HUNDREDS

② $\frac{15}{72} = 0.208\bar{3}$ $0.208 \approx 21\%$

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

$12.25 \rightarrow 12$

$20\% \text{ of } 12 = 2.40$

$10\% \text{ of } 12 = 1.20$

$2.40 = 1.20 \times 2$

Correction notes

10% IS LIKE MULTIPLYING BY 0.10

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

$I = P \times R \times T$

↑ PRINCIPLE ↑ RATE (DECIMAL) ↑ TIME IN YEARS

6 MONTHS = $\frac{1}{2}$ YEAR

$\frac{1}{2} = 0.5$

Correction notes

$3\% = 0.03$

$390(0.03)(5)$

$11.7(5) = 58.5$

↑

\$11.70 PER YEAR

\$58.50 IN INTEREST

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

$64.95(0.055) = 3.57225$

↑

TAX = \$3.57

$\$64.95 + \$3.57 = \$68.52$ TOTAL COST FOR THE CLEATS

Correction notes

0.055

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

0.08

$89(0.2) = 17.80$ ← DISCOUNT

$89 - 17.80 = 71.2$ ← SALE PRICE

$71.2(0.08) = 5.696 \approx \5.70

Correction notes

20% = 0.20

\$71.20

+ 5.70

\$76.90 TOTAL FOR THE TOASTER OVEN

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

$21(0.22) = 4.62$ ← TAX AND TIP

$21 + 4.62 = \$25.62$ TOTAL WINONA PAID

Correction notes

← HAIRCUT 100%

1.22

← TAX + TIP 22%

$21(1.22) =$

\$25.62

$1.22 = 122\%$