

Accelerated Math 7 Chapter 6 Test

<p>1. Which proportion can be used to find what number is 44% of 50? <i>PART</i></p> <p>A. $\frac{x}{50} = \frac{44}{100}$ B. $\frac{50}{x} = \frac{44}{100}$</p> <p>C. $\frac{x}{50} = \frac{64}{100}$ D. $\frac{44}{x} = \frac{x}{50}$</p>	<p>A</p>
<p>2. 75 is 125% of what number? <i>WHOLE</i></p> <p>A. 1.6 B. 50 C. 60 D. 200</p> <p>$\frac{75}{x} = \frac{125}{100}$ $\frac{7500 = 125x}{125 \quad 125}$</p> <p>$60 = x$</p>	<p>C</p>
<p>3. Thirty-six of 80 marbles are blue. What percent of the marbles are blue? <i>PERCENT</i></p> <p>A. 45% B. 22.2% C. 36% D. 48%</p> <p>$\frac{36}{80} = \frac{x}{100}$ $\frac{3600 = 80x}{80 \quad 80}$ $x = 45$</p>	<p>A</p>
<p>4. Results from a survey show that that 36% of dog owners say their dog sleeps in a family member's bed. If 12,500 pet owners were polled, how many people made this claim? <i>PART</i></p> <p>A. 347 B. 4167 C. 4500 D. 8000</p> <p><i>PART = 12,500 (36%) 12,500 (0.36)</i></p>	<p>C</p>
<p>5. Which equation can be used to find what percent 18 is of 125? <i>PERCENT</i></p> <p>A. $125 = 18p$ B. $(125 - 18) = 360p$</p> <p>C. $18 = 125p$ D. $18(125) = p$</p> <p><i>SOLVE FOR "P"</i></p>	<p>C</p>
<p>6. Fiona deposited \$900 in the bank over 2 years. She earned \$67.50 in simple interest at the end of the 2 years. What was the annual interest rate?</p> <p>A. $3\frac{3}{4}\%$ B. 6.75% C. 33.75% D. $66\frac{2}{3}\%$</p> <p>$\frac{\\$67.50}{2} = \\33.75 PER YEAR $\frac{33.75}{900} = 0.0375$</p>	<p>A</p>
<p>7. Lisa's little brother weighed 45lbs. on his 5th birthday. On his 9th birthday he weighed 75lbs. What was the percent of change in her brother's weight to the nearest hundredth?</p> <p>$\frac{75-45}{45} = \frac{30}{45} = 0.\bar{6}$</p>	<p>$66\frac{2}{3}\%$ OR 66.67%</p>
<p>8. An investment of \$1000 is compounded annually at 8%. What is the total amount of money after 2 years?</p> <p>A. \$160 B. \$166.40 C. \$1160 D. \$1166.40</p> <p>① $\\$1,000 (0.08) = \\80.00 $\\$1,080.00$</p> <p>② $\\$1,080 (0.08) = \\86.40 $\frac{86.40}{1,166.40}$</p>	<p>D</p>

<p>9. A store makes a profit of \$8 on a sweater after a markup of 40%. What is the selling price of the sweater?</p> <p>A. \$11 B. \$28 C. \$32 D. \$50 <i>PART</i></p> $\frac{B}{x} = \frac{40}{100}$ $\frac{800}{40} = \frac{40x}{40}$ $x = 20 \text{ (ORIGINAL PRICE)}$ $\frac{\$20}{8} = \frac{\$28}{8}$	<p>B</p>
<p>10. During peak season, a hotel room costs \$135 per night. During the off-season, it costs \$90 per night. Which describes the percent of change from peak season to off-season?</p> <p>A. $33\frac{1}{3}\%$ decrease B. 50% increase $\frac{135-90}{135} = \frac{45}{135} = 0.\bar{3}$</p> <p>C. $33\frac{1}{3}\%$ increase D. 50% decrease</p>	<p>A</p>
<p>11. Evan buys a suit marked \$64.99. He receives a 20% discount. Which equation can be used to determine the sale price of the suit? <i>WHOLE - PART</i></p> <p>A. $s = 64.99(0.20)$ B. $s = 64.99(1.80)$ <i>SAVE 20%</i></p> <p>C. $s = 64.99(0.80)$ D. $s = 64.99(1.20)$ <i>PAY 80%</i></p>	<p>C</p>
<p>12. A used desktop computer sells for \$430, which is a 75% reduction from the original price. What was the original price of the computer?</p> $\frac{430}{x} = \frac{25}{100}$ $\frac{43000}{25} = \frac{25x}{25}$ $x = 1720$	<p>\$1,720</p>
<p>13. A bottle of vitamins should have 60 vitamins. The actual number in Jose's bottle is 64. What is the percent error to the nearest hundredth?</p> $\frac{64-60}{64} = \frac{4}{64} = 0.0625$	<p>6.25%</p>
<p>14. Which fraction would be best to use to find 25% of 16 mentally?</p> <p>A. $\frac{1}{5}$ B. $\frac{1}{4}$ C. $\frac{1}{3}$ D. $\frac{1}{2}$</p>	<p>B</p>
<p>15. Mai-Yo deposits \$750 into an account that earns 2% simple interest. Marley deposits \$525 into an account that earns 4% simple interest. How much money is in each account after 10 years? At those interest rates, how many years would it be before Marley has more money than Mai-Yo?</p> $\$750(0.02)(10)$ $\$15(10) = \150 $\$750 + \$150 = \text{\$900}$ $\$525(0.04)(10)$ $\$21(10) = \210 $\$525 + \$210 = \text{\$735}$ <p><i>MAI-YO STARTS WITH \$225 MORE THAN MARLEY</i></p> <p><i>MARLEY EARNS \$6 MORE PER YEAR</i></p> $\frac{\$225}{\$6} = 37.5 \text{ YEARS}$	<p>Mai-Yo (10 yrs) \$900</p> <p>Marley (10 yrs) \$735</p> <p>Years till Marley passes Mai-Yo 37.5 OR 38 YEARS</p>