

Lesson 6.1 Review & Refresh

1. A six-sided number cube is used in a game.
 - a. Find the sample space. How many possible outcomes are there?
1, 2, 3, 4, 5, 6 6 outcomes
 - b. In how many ways can rolling an odd number occur?
3 ways
 - c. In how many ways can rolling a number greater than 7 occur?
0 ways

Identify the percent of change as an increase or decrease. Then find the percent of change. Round to the nearest tenth of a percent if necessary. $\frac{\text{second \#} - \text{first \#}}{\text{first \#}}$

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| <p>2. 100 pounds to 110 pounds
 $\frac{110-100}{100} = 0.1$ increase
 10%</p> <p>4. 72 miles to 88 miles
 $\frac{88-72}{72} = 0.222$
 22.2% increase</p> | <p>3. 60 inches to 50 inches
 $\frac{50-60}{60} = -0.166$
 16.6% decrease</p> <p>5. 80 hours to 60 hours
 $\frac{60-80}{80} = -0.25$
 25% decrease</p> |
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An account earns simple annual interest. Find (a) the interest earned and (b) the balance of the account. $I = P \cdot r \cdot t$

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| <p>6. \$1250 at 4% for 7 years
 $1250 \cdot 0.04 \cdot 7 = 350$
 $1250 + 350 = \\$1600$</p> | <p>7. \$5000 at 1.5% for 66 months
 ↑ decimal
 ↑ years
 $66 \div 12 = 5.5$ years
 $5000 \cdot 0.015 \cdot 5.5 = 412.50$
 $5000 + 412.50 = \\$5412.50$</p> |
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Describe the likelihood of the event given its probability.

8. The probability you make a shot is $\frac{7}{10}$.
70% likely
9. There is a 0% chance of snow tomorrow.
impossible

Find the selling price.

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| <p>10. Cost to seller: \$80; % markup: 25%
 $80 \cdot 0.25 = 20$
 $80 + 20 = \\$100$</p> | <p>11. Cost to seller: \$35; % markup: 75%
 $35 \cdot 0.75 = 26.25$
 $35 + 26.25 = \\$61.25$</p> |
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12. A football team scores 42 points in their first game. In the second game, the team scores 7 points. Find the percent of change in the point totals.
 $\frac{7-42}{42} = -0.83$ about 83%