The two spinners at the right are spun. Find each probability.

1. \( P(4 \text{ and } C) \) \( \frac{1}{8} \cdot \frac{1}{6} = \frac{1}{48} \)

2. \( P(1 \text{ and } A) \) \( \frac{1}{8} \cdot \frac{1}{2} = \frac{1}{16} \)

3. \( P(\text{even and } C) \) \( \frac{1}{2} \cdot \frac{1}{6} = \frac{1}{12} \)

4. \( P(\text{odd and } A) \) \( \frac{1}{2} \cdot \frac{1}{2} = \frac{1}{4} \)

5. \( P(\text{greater than } 3 \text{ and } B) \) \( \frac{5}{8} \cdot \frac{1}{6} = \frac{5}{48} \)

6. \( P(\text{less than } 5 \text{ and } B) \) \( \frac{1}{2} \cdot \frac{1}{3} = \frac{1}{6} \)

There are 10 yellow, 6 green, 9 orange, and 5 red cards in a stack of cards turned facedown. Once a card is selected, it is **not replaced**. Find each probability.

7. \( P(\text{two yellow cards}) \) \( \frac{10}{30} \cdot \frac{9}{29} = \frac{3}{29} \)

8. \( P(\text{two green cards}) \) \( \frac{6}{30} \cdot \frac{5}{29} = \frac{1}{29} \)

9. \( P(\text{a yellow card and then a green card}) \) \( \frac{10}{30} \cdot \frac{6}{29} = \frac{1}{29} \)

10. \( P(\text{a red card and then an orange card}) \) \( \frac{5}{30} \cdot \frac{9}{29} = \frac{3}{29} \)

11. \( P(\text{two cards that are not orange}) \) \( \frac{21}{30} \cdot \frac{20}{29} = \frac{14}{29} \)

12. \( P(\text{two cards that are neither red nor green}) \) \( \frac{11}{30} \cdot \frac{18}{29} = \frac{5}{145} \)

13. A store sells a box of highlighters that contains 4 yellow, 3 blue, 2 pink, and 1 green highlighter. What is the probability of randomly picking 1 blue and 1 pink highlighter from the box?

\[ \frac{3}{10} \cdot \frac{2}{9} = \frac{1}{15} \]

For Exercises 14 and 15, use the information in the table.

At a car rental office, 63% of the customers are men and 37% are women.

<table>
<thead>
<tr>
<th>Car Requests</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact</td>
<td>25%</td>
</tr>
<tr>
<td>Full-size</td>
<td>37%</td>
</tr>
<tr>
<td>Convertible</td>
<td>10%</td>
</tr>
<tr>
<td>SUV</td>
<td>16%</td>
</tr>
<tr>
<td>Luxury</td>
<td>12%</td>
</tr>
</tbody>
</table>

15. What is the probability that the next customer will be a woman who requests a convertible?

\[ \frac{27}{100} \cdot \frac{1}{10} = \frac{27}{1000} \text{ or } 2.7\% \]

16. What is the probability that the next customer will be a man who requests either a compact car or luxury car?

\[ \frac{3}{100} \cdot \frac{24}{100} = \frac{2331}{10000} \text{ or } 23.31\% \]

Identify the properties.

17) 11 \cdot 15 = 15 \cdot 11 \quad \text{**COMMUTATIVE**}

18) 31 + (4 + 17) = (31 + 4) + 17 \quad \text{**ASSOCIATIVE**}

19) 5(3 + a) = 15 + 5a \quad \text{**DISTRIBUTIVE**}

20) 30 \cdot 0 = 0 \quad \text{**ZERO PROPERTY**}

21) 9x + 0 = 9x \quad \text{**IDENTITY (0)**}

22) -8 + 8 = \quad \text{**INVERSE (0)**}

Fill in the blank.

23) Absolute value measures a number's \text{**Distance**} from zero.

24) |-13| - |-20| = -7

25) |-11| + |14| = 25