1. A point is randomly selected on $\overline{XY}$. What is the probability (p) that it will be closer to the midpoint of $\overline{XY}$ than to either X or Y?
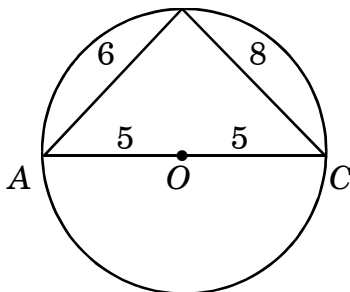
    A $p = \frac{1}{4}$

    B $p = \frac{1}{3}$
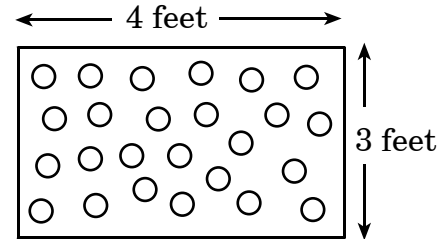
    C $p = \frac{1}{2}$

    D $p = \frac{3}{4}$

2. If Jim threw a marble inside the circle, what is the probability that it would land inside the triangle?

    A   0.08

    B   0.15

    C   0.31

    D   0.61

3. To win a carnival game, Keisha must throw a dart at a board four feet by three feet and hit one of the 25 circles on the board. The diameter of each circle is four inches.

    Approximately what percent of the time will a randomly thrown dart that hits the board also hit a circle?

    A   18%

    B   26%

    C   63%

    D   73%

    End of Goal 4 Sample Items

1. **Objective 4.01**
    Use length, area, and volume to solve problems involving probability.
    Thinking Skill: Analyzing   **Correct Answer:** C

2. **Objective 4.01**
    Use length, area, and volume to solve problems involving probability.
    Thinking Skill: Generating   **Correct Answer:** C

3. **Objective 4.01**
    Use length, area, and volume to solve problems involving probability.
    Thinking Skill: Integrating   **Correct Answer:** A