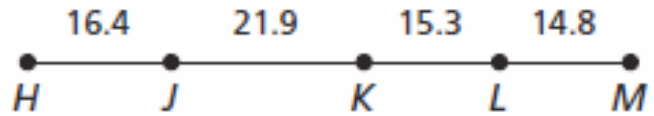NAME_____ DATE_____ PER_____

GEOMETRIC PROBABILITY

A point is chosen randomly on $\overline{HM}$. Find the probability of each event on #1 – 4. Round to the nearest hundredth.

1. The point is on $\overline{JK}$.

16.4   21.9   15.3   14.8

H   J   K   L   M
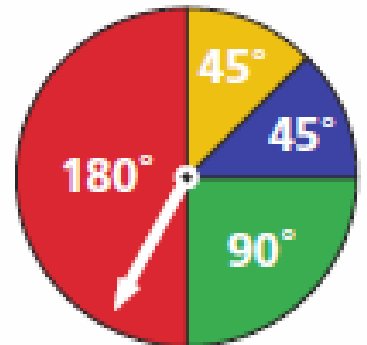
2. The point is not on $\overline{LM}$.

3. The point is on $\overline{HJ}$ or $\overline{KL}$.

4. The point is not on $\overline{JK}$ or $\overline{LM}$.

Use the spinner to find the probability of each event on #5 – 8.

5. The pointer landing on the 180° section.

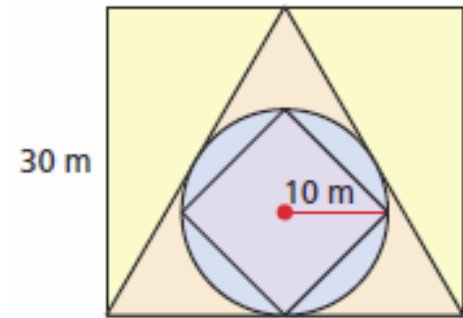6. The pointer landing on either of the 45° sections.

7. The pointer not landing on the 90° section.

8. The pointer landing on either the 180° section or the 90° section.

Find the probability that a point chosen randomly inside the rectangle is in each shape on #9 – 12. Round to the nearest hundredth if necessary.
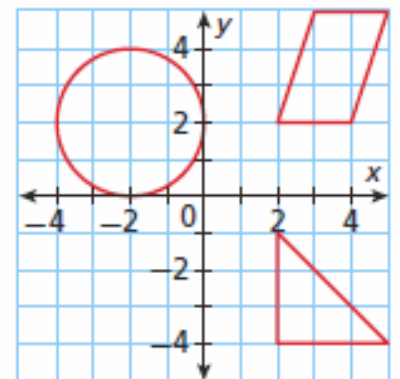
9. The equilateral triangle

30 m

10 m

10. The square

11. The part of the circle that does not include the square

12. The part of the rectangle that does not include the square, circle, or triangle

13. A point is chosen at random in the coordinate plane such that $-5 \leq x \leq 5$ and $-5 \leq y \leq 5$. Find the probability that the point is inside the triangle or the circle. Round to the nearest hundredth.

A carnival game board consists of balloons that are 3 inches in diameter and are attached to a rectangular board. A player who throws a dart at the board wins a prize if the dart pops a balloon.
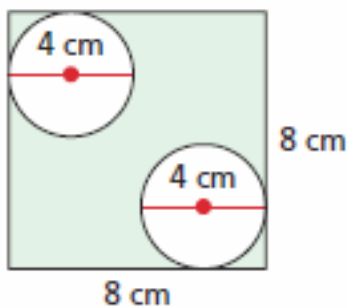
14. Find the probability of winning if there are 40 balloons on the board.
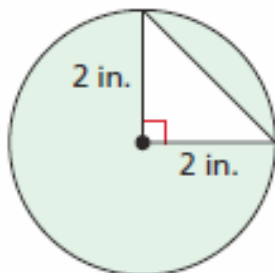
50 in.

30 in.
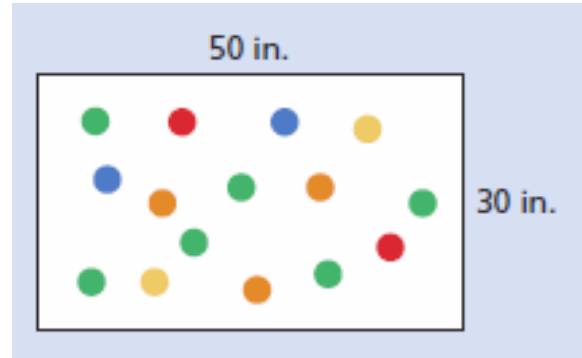
15. How many balloons must be on the board for the probability of winning to be at least 0.25?

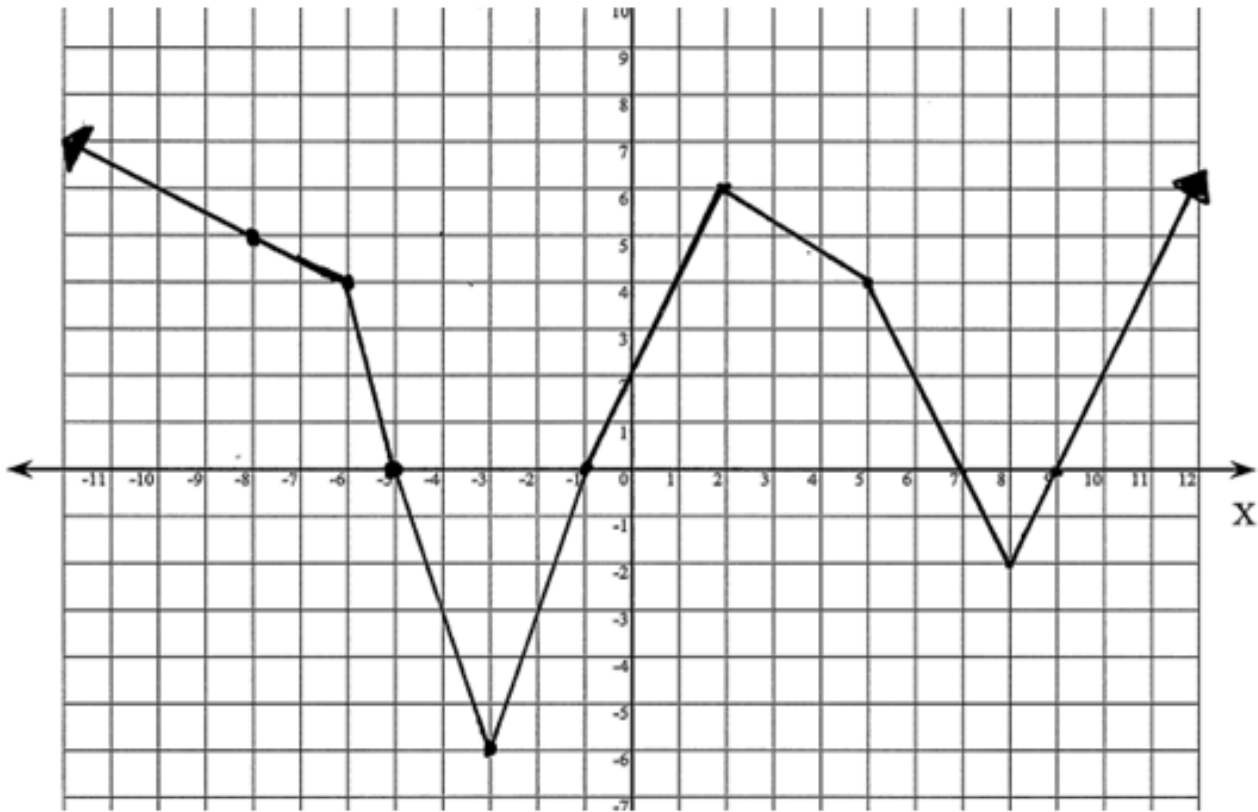**Find the area of the shaded regions in #16 & #17. Round to the nearest tenth.**

16.

4 cm

8 cm

4 cm

8 cm

17.

2 in.

2 in.

Find the total area and net area under the curve from -3 ≤ x ≤ 5.

18. Total Area = _____

19. Net Area = _____