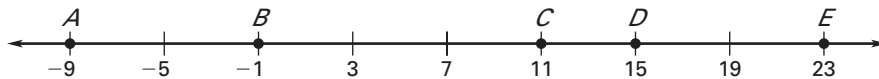


LESSON
11.7**Practice C***For use with pages 770–777*

Find the probability that a point K , selected randomly on \overline{AE} , is on the given segment. Express your answer as a fraction, decimal, and percent.



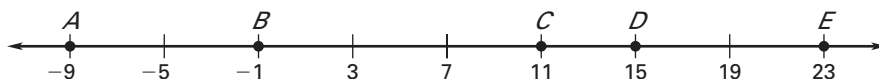
1. \overline{AC}

2. \overline{BD}

3. \overline{CE}

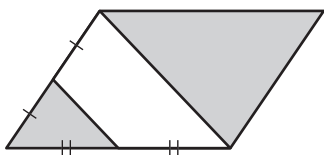
4. \overline{AD}

A point is chosen on \overline{AE} . Determine the probability described.

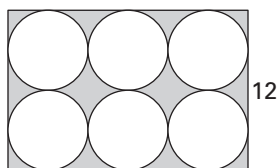
5. The point is closer to point B than to point E .6. The point is closer to point C than to point A .

Find the probability that a randomly chosen point in the figure lies in the shaded region.

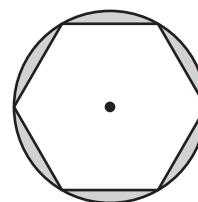
7.



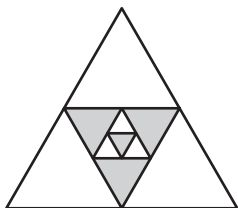
8.



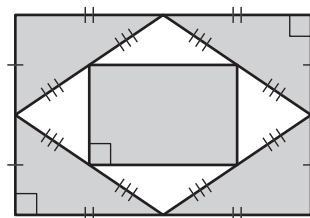
9.



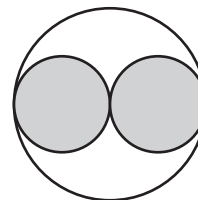
10.



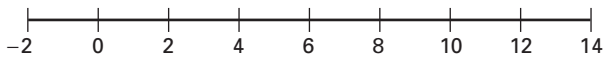
11.



12.



Find the probability that a point chosen at random on the segment satisfies the inequality.



13. $2x + 3 \leq 7$

14. $3x - 3 \leq 18$

15. $3x + 4 \geq 28$

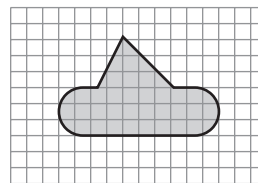
16. $2x + 11 \geq 9$

Use the scale drawing.

17. What is the approximate area of the shaded figure in the scale drawing?

18. Find the probability that a randomly chosen point lies in the shaded region.

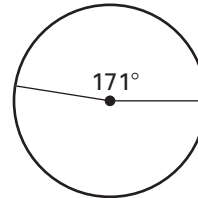
19. Find the probability that a randomly chosen point lies outside of the shaded region.



LESSON
11.7**Practice C** *continued*
For use with pages 770–777

In Exercises 20 and 21, use the following information.

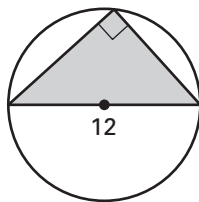
Arcs and Sectors The figure to the right shows a circle with a sector that intercepts an arc of 171° .



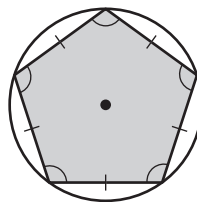
20. Find the probability that a randomly chosen point on the circle lies on the arc.
21. Find the probability that a randomly chosen point in the circle lies in the sector.

Find the probability that a randomly chosen point in the figure lies in the shaded region.

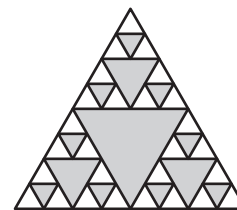
22.



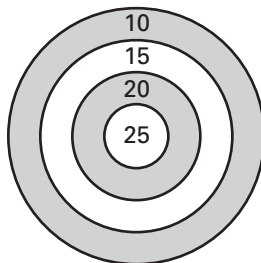
23.



24.



25. **City Bus** You have planned to meet your friend at the mall at 4 P.M. The city bus runs every 15 minutes and the trip to the mall is 9 minutes. You arrive at the bus stop at 3:48 P.M. What is the probability that you will arrive at the mall by 4 P.M.?
26. **Coffee** You stop at the same convenience store each day to get a refill of your travel mug. The coffee decanter holds 128 ounces and your mug is 32 ounces. What is the probability that on any given day you will have to tell the store manager that the coffee is out and they need to make more?
27. **Archery Target** Determine the probability for each outcome on the archery target shown. The center ring has a radius of 1 unit. Each successive ring has a radius 1 unit greater than the previous one. Assume the arrow is equally likely to hit any point on the target.



- a. 25 points
- b. 20 points
- c. 15 points
- d. 10 points