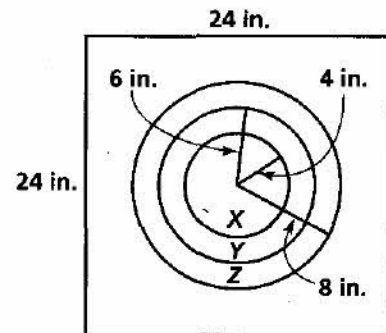


Practice 7-8

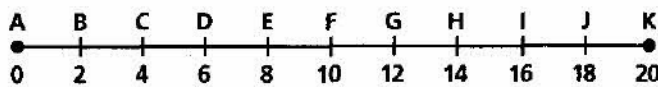
Geometric Probability

Use the dartboard at the right for Exercises 1–3.

- If a dart hits the board, find the probability that it will land in region X .
- If a dart hits the board, find the probability that it will land in region Y .
- If a dart hits the board, find the probability that it will land in region Z .



Find the probability that a point chosen at random from \overline{AK} is on the given segment.



- | | | |
|--------------------|--------------------|--------------------|
| 4. \overline{CF} | 5. \overline{BI} | 6. \overline{GK} |
| 7. \overline{FG} | 8. \overline{AK} | 9. \overline{AC} |
- Roberto's trolley runs every 45 minutes. If he arrives at the trolley stop at a random time, what is the probability that he will *not* have to wait more than 10 minutes?
 - The state of Connecticut is approximated by a rectangle 100 mi by 50 mi. Hartford is approximately at the center of Connecticut. If a meteor hit the earth within 200 mi of Hartford, find the probability that the meteor landed in Connecticut.
 - A stop light at an intersection stays red for 60 seconds, changes to green for 45 seconds, and then turns yellow for 15 seconds. If Jamal arrives at the intersection at a random time, what is the probability that he will have to wait at a red light for more than 15 seconds?

In each figure, a point between A and B on the number line is chosen at random. What is the probability that the point is between C and D ?

