



10-8 Solve It!



SOLVE IT!

Getting Ready!

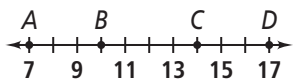
A fair coin is equally likely to land heads up or tails up. Suppose you toss a fair coin three times. What is the probability that the coin will land tails up exactly twice? Explain your reasoning.



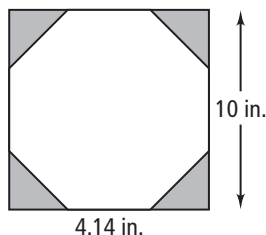
Use the strategy "making a chart" to make a list of all possible outcomes.

10-8 Lesson Quiz

1. Point O on \overline{AD} is chosen at random. What is the probability that O is on \overline{BC} ?



2. A bus picks up passengers at a bus stop every 12 minutes in the morning. Suppose Adrian arrives at the bus stop at a random time. What is the probability that he will have to wait 5 minutes or less for the next bus?
3. A regular octagon is inscribed in a square. A point P in the square is chosen at random. What is the probability that P lies in the shaded region?



Answers

Solve It!

$\frac{3}{8}$; explanations may vary.
 Sample: The possible outcomes for tossing a coin three times are (H, H, H), (H, H, T), (H, T, H),

(H, T, T), (T, H, H), (T, H, T), (T, T, H), and (T, T, T). Three out of the eight possible outcomes have two tails.

Lesson Quiz

1. 0.4 or 40%
2. $\frac{5}{12}$
3. 17.2%