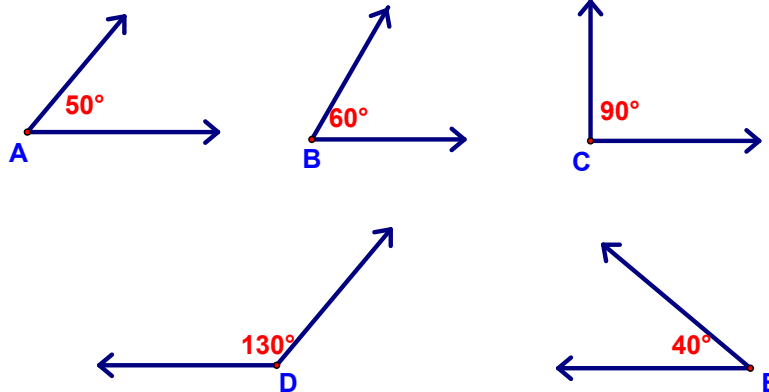Use the following diagram for problems 1 – 4:

1.

   If one of the five angles is selected at random, what is the probability that the angle is acute?

2.

   If one of the five angles is selected at random, what is the probability that the angle is right?

3.

   If one of the five angles is selected at random, what is the probability that the angle is obtuse?

4.

   If one of the five angles is selected at random, what is the probability that the angle is straight?

5.

If a point is chosen randomly on $\overline{PR}$, what is the probability that it is within 2 units of R?

P   R

4   10

Use the five angles shown for problems 1 - 4 for problems 6 – 9:

6.

If two of the five angles are selected at random, what is the probability that both are acute?

7.

If two of the five angles are selected at random, what is the probability that one of them is obtuse?

8.

If two of the five angles are selected at random, what is the probability that one of them is right and the other is obtuse?

9.

An angle is selected at random from the five angles and then replaced. A second selection is then made at random (thus, the same angle can be selected twice). What is the probability that an acute angle is selected both times?

11.

The second hand of a clock sweeps continuously around the face of the clock. What is the probability that at any random moment, the second hand is between 7 and 12?

13.

If the four points shown are to be labeled with the letters A, B, C, and D in such a way that A and two of the otherpoints are collinear, in how many different ways can the diagram be labeled?