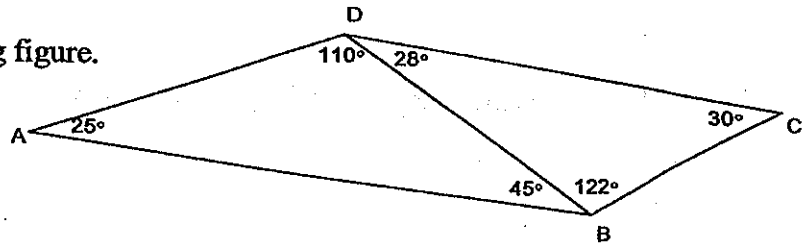


Accelerated Geometry Midterm Review 1

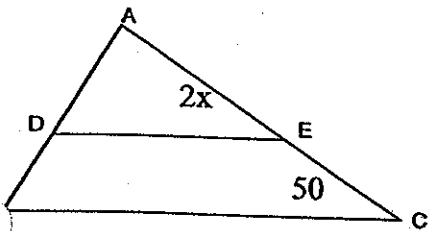
Given the following lengths determine whether they can be the sides of a triangle.

- a. 9, 9, 16 b. .8, 1.5, 1.7 c. 6, 10, 18 d. 4, 5, 8

2. Find the shortest segment in the following figure.



3. Given D and E are midpoints of the respective sides. Find BC if $DE = 5$ and the value of x .



4. Three times an angle is 10 less than its complement. Write an equation and find the measure of the angle.

5. If \overline{AC} and \overline{BD} are diagonals of a rectangle, which of the following must be true.

- A. $\overline{AC} \perp \overline{BD}$ B. $\overline{AC} \cong \overline{BD}$ C. \overline{AC} and \overline{BD} bisect each other.

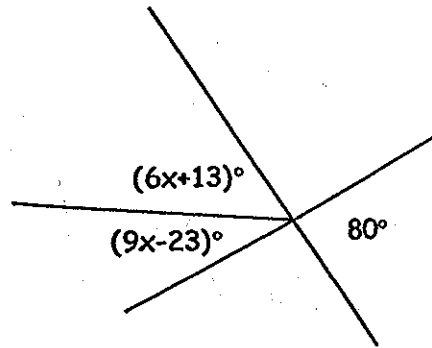
6. Find the measure of an exterior angle of a regular octagon.

7. Write the converse, inverse and contrapositive of the statement:
If two angles of a triangle are congruent, then the sides opposite them are congruent.

8. Find the slope of the line passing through $(-2, 8)$ and $(6, 8)$.

9. In $\triangle EFG$, $m\angle E = 6x - 8$, $m\angle F = 7x + 3$, and $m\angle G = 3x - 7$. List the sides in order from longest to shortest.

10. Find the value of x .



11. Find the measure of one interior angle of a regular dodecagon.