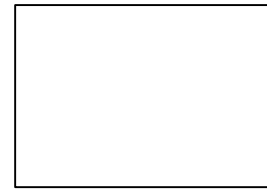




G.9 Quadrilaterals

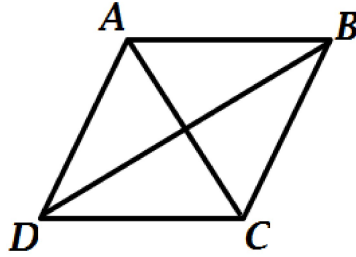


7



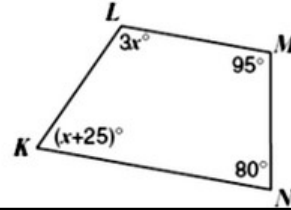
1. In the rhombus, $AC = 24$ and $BD = 32$. Find the perimeter of the rhombus.

- A. 20
- B. 80
- C. 96
- D. 128



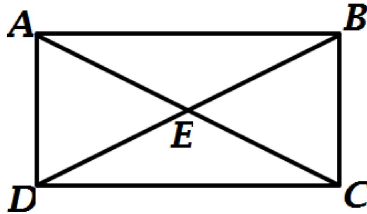
2. Given quadrilateral $KLMN$, what is the value of x ?

- A 35
- B 40
- C 45
- D 50



3. Figure $ABCD$ is a rectangle. \overline{AC} and \overline{BD} are diagonals. $AC = 30$ meters and $BC = 18$ meters. What is the length of \overline{DE} ?

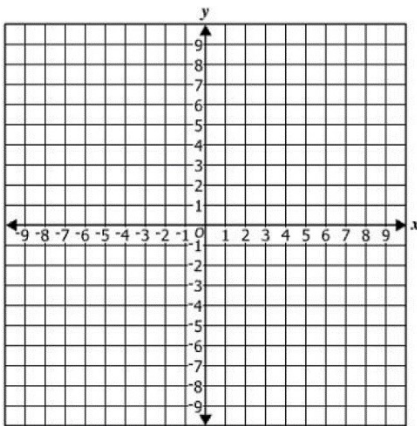
- A 8 meters
- B 10 meters
- C 15 meters
- D 24 meters



4. Darnell is cutting a piece of wood for a table top. He wants to be sure that it is in the shape of a rectangle. He knows that it's a parallelogram, but which will tell him that it is definitely a rectangle?

- A. The opposite sides are congruent.
- B. The diagonals are perpendicular.
- C. The diagonals are congruent.
- D. The diagonals of the window bisect each other.

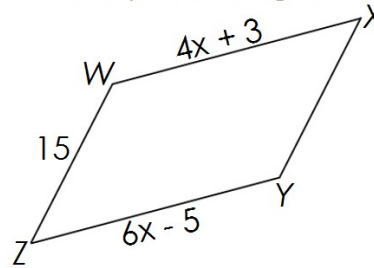
5. Three vertices of a parallelogram have coordinates $(0, 1)$, $(3, 7)$, and $(4, 4)$. Place a point on the graph that could represent the fourth vertex of the parallelogram.



6.

Directions: Type your answer in the box.

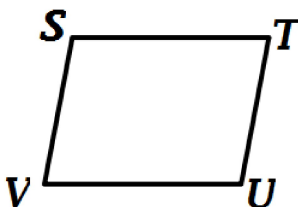
$WXYZ$ is a parallelogram.



What is ZY ?

$ZY =$

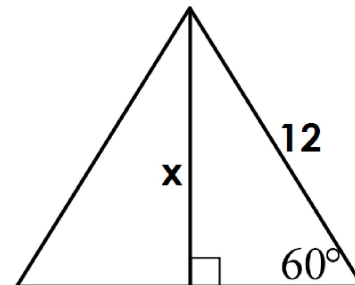
7. In parallelogram $STUV$, $m\angle S = (5x - 30)^\circ$ and $m\angle T = (3x + 10)^\circ$. What is the value of x ?



- A. 50
- B. 20
- C. 25
- D. 12.5

BONUS

Which is closest to the value of x ?



- A. 6.9
- B. 13.9
- C. 10.4
- D. 6