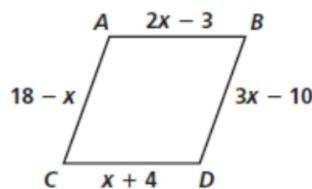


1. Find the value of  $x$  in rhombus ABDC. Then find each side length.

$$x = \underline{7} \quad AB = \underline{11}$$

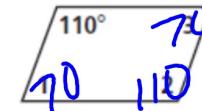


$$BD = \underline{11} \quad CD = \underline{11} \quad AC = \underline{11}$$

$$2x - 3 = x + 4 \\ x = 7$$

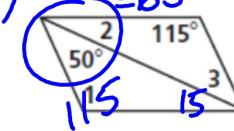
Find the measure of the numbered angles for each parallelogram.

2.  $m\angle 1 = \underline{70}$   
 $m\angle 2 = \underline{110}$   
 $m\angle 3 = \underline{70}$



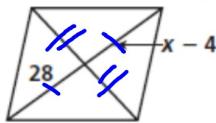
3.  $m\angle 1 = \underline{115}$   
 $m\angle 2 = \underline{15}$   
 $m\angle 3 = \underline{50}$

$$\frac{180(n-2)}{n} = 65$$



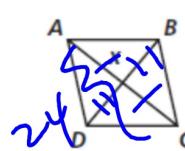
Find the value of  $x$  in each parallelogram below.

4.  $x - 4 = 28$



$$x = \underline{32}$$

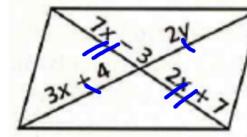
5.  $AC = 24$ .



$$x = \underline{12}$$

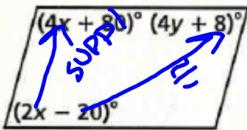
Find the values for which the figure is a parallelogram.

6.  $x = \underline{2} \quad y = \underline{5}$



$$\begin{aligned} 3x + 4 &= 2y \\ 10 &= 2y \\ 7x - 3 &= 2x + 7 \\ 5x &= 10 \\ x &= 2 \end{aligned} \quad \begin{aligned} y &= 5 \end{aligned}$$

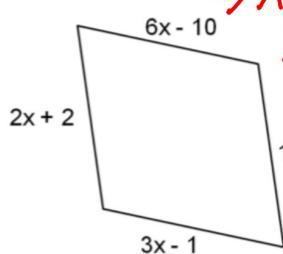
7.  $x = \underline{20}$   $y = \underline{3}$



$$\begin{aligned} 4y + 8 &= 2x - 20 \quad y = 3 \\ 4y + 8 &= 2x - 20 \quad y = 3 \\ 4x + 80 + 2x - 20 &= 180 \\ 6x + 60 &= 180 \\ 6x &= 120 \\ x &= 20 \end{aligned}$$

2. This figure is a Rhombus

$$\begin{aligned} x &= \underline{3} \\ y &= \underline{5} \end{aligned}$$



$$\begin{aligned} 6x - 10 &= 3x - 1 \\ 3x &= 9 \quad x = 3 \\ 2x + 2 &= 18 - 2y \\ 8 &= 18 - 2y \\ 18 - 2y - 10 &= -2y \\ y &= 5 \end{aligned}$$

Use the properties of special quadrilaterals to find the value of each variable.

1. This figure is a Kite.

$$\begin{aligned} x &= \underline{2} \\ y &= \underline{-3} \end{aligned}$$

$$\begin{aligned} 4x - 2 &= 3x \\ 3x &= 6 \\ x &= 2 \\ 8 - y &= 2y + 17 \\ 8 &= 3y + 17 \\ -9 &= 3y \end{aligned}$$

3. This figure is a Parallelogram.

$$x = \underline{15}$$

$$\begin{aligned} 8x - 40 + 5x + 25 &= 180 \\ 13x &= 195 \end{aligned}$$