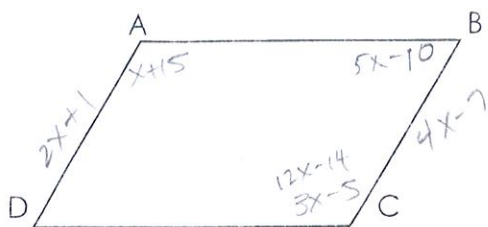


Below is parallelogram ABCD.



- If $m\angle A = x + 15$, and $m\angle C = 3x - 5$, find the $m\angle A$ and $m\angle B$.

$$x + 15 = 3x - 5$$

$$15 = 2x - 5$$

$$20 = 2x$$

$$10 = x$$

$$m\angle A = 10 + 15 = 25$$

$$m\angle C = 180 - 25 = 155^\circ$$
- If $AD = 2x + 1$ and $BC = 4x - 7$, find BC .

$$2x + 1 = 4x - 7$$

$$1 = 2x - 7$$

$$8 = 2x$$

$$x = 4$$

$$BC = 4(4) - 7 = 9$$
- If $m\angle B = 5x - 10$ and $m\angle C = 12x - 14$, find the $m\angle A$.

$$5x - 10 + 12x - 14 = 180$$

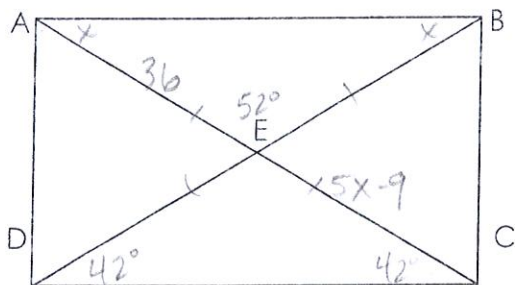
$$17x - 24 = 180$$

$$17x = 204$$

$$x = 12$$

$$m\angle A = 12(12) - 14 = 130$$

Below is rectangle ABCD.



- If $AE = 36$, and $CE = 5x - 9$, find BE . 36
- If $m\angle BDC = 42^\circ$, find $m\angle ACD$. 42°
- If $m\angle AEB = 52^\circ$, find $m\angle EAB$ and $m\angle EBA$.

$$x + x + 52 = 180$$

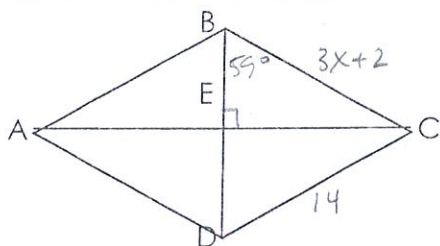
$$2x + 52 = 180$$

$$2x = 128$$

$$x = 64$$

$$m\angle EAB \text{ and } m\angle EBA = 64^\circ$$

Below is rhombus ABCD.



- If $m\angle CBD = 59^\circ$, find $m\angle BCE$.

$$180 - 59 - 90 = 31^\circ$$
- If $CD = 14$ and $BC = 3x + 2$, find x .

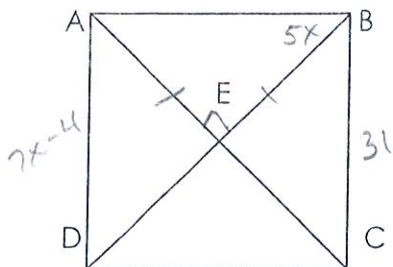
$$3x + 2 = 14$$

$$3x = 12$$

$$x = 4$$
- If $m\angle DBC = 54^\circ$, find $m\angle ABD$.

$$54^\circ$$

Below is square ABCD.



- If the $m\angle ABD = 5x$, find x .

$$45 = 5x$$

$$x = 9$$
- If $m\angle AEB = 5x - 10$, find x .

$$5x - 10 = 90$$

$$5x = 100$$

$$x = 20$$
- If $AD = 7x - 4$ and $BC = 31$, find x .

$$7x - 4 = 31$$

$$7x = 35$$

$$x = 5$$