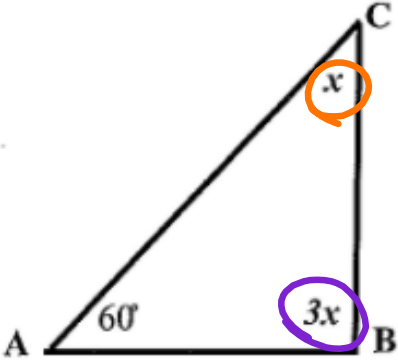


1)



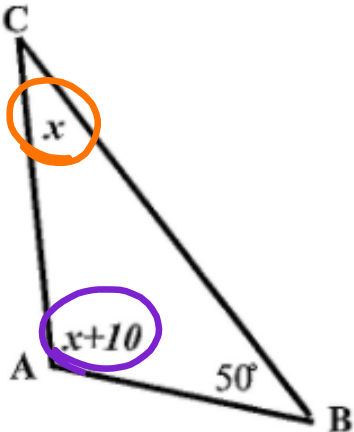
$x = \underline{30}$
 $\angle C = \underline{30^\circ}$
 $\angle B = \underline{3 \cdot 30 = 90^\circ}$

$$60 + 3x + x = 180$$

$$60 + 4x = 180$$

$$\begin{array}{r} -60 \\ \hline 4x = 120 \\ \hline x = 30 \end{array}$$

2)



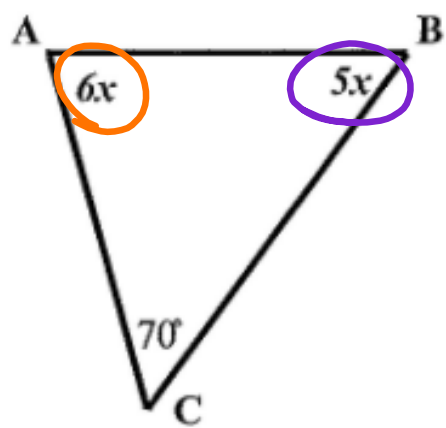
$x = \underline{60}$
 $\angle C = \underline{60^\circ}$
 $\angle A = \underline{60 + 10 = 70^\circ}$

$$\underline{x+10} + 50 + \underline{x} = 180$$

$$2x + 60 = 180$$

$$\begin{array}{r} -60 \\ \hline 2x = 120 \\ \hline x = 60 \end{array}$$

3)



$x = \underline{10}$

$\angle A = \underline{6 \cdot 10 = 60^\circ}$

$\angle B = \underline{5 \cdot 10 = 50^\circ}$

$$6x + 5x + 70 = 180$$

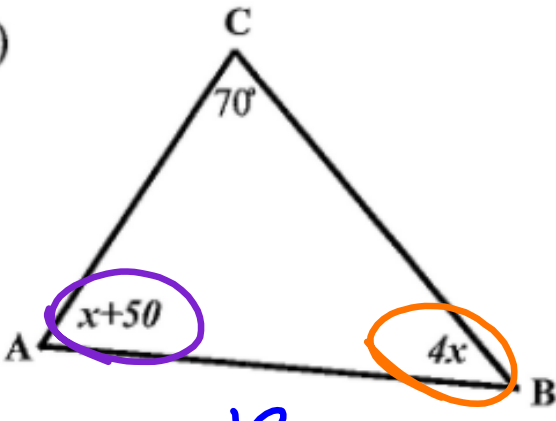
$$11x + 70 = 180$$

$$\begin{array}{r} -70 \\ -70 \end{array}$$

$$\frac{11x}{11} = \frac{110}{11}$$

$$x = 10$$

4)



$x = \underline{12}$

$\angle B = \underline{4 \cdot 12 = 48^\circ}$

$\angle A = \underline{12 + 50 = 62^\circ}$

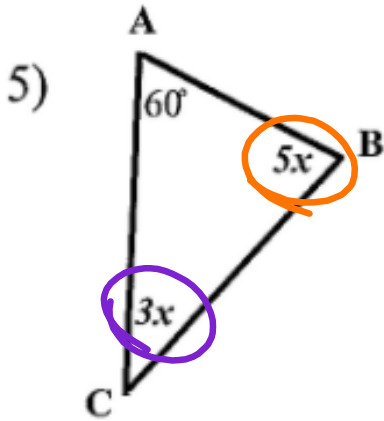
$$70 + x + 50 + 4x = 180$$

$$120 + 5x = 180$$

$$\begin{array}{r} -120 \\ -120 \end{array}$$

$$\frac{5x}{5} = \frac{60}{5}$$

$$x = 12$$



$$x = \underline{15}$$

$$\angle B = \underline{5 \cdot 15 = 75^\circ}$$

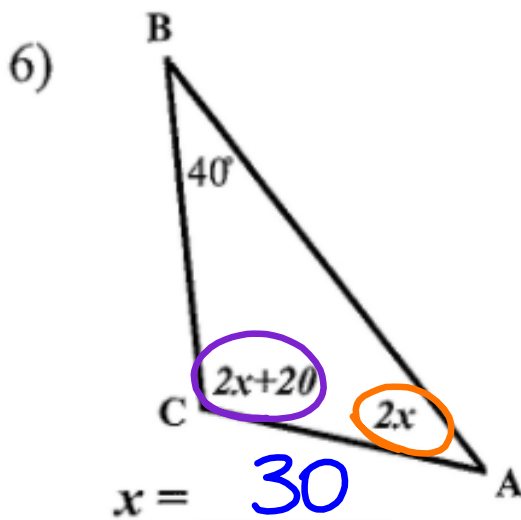
$$\angle C = \underline{3 \cdot 15 = 45^\circ}$$

$$60 + 5x + 3x = 180$$

$$\begin{array}{r} 60 + 8x = 180 \\ -60 \qquad -60 \end{array}$$

$$\frac{8x}{8} = \frac{120}{8}$$

$$x = 15$$



$$x = \underline{30}$$

$$\angle A = \underline{2 \cdot 30 = 60^\circ}$$

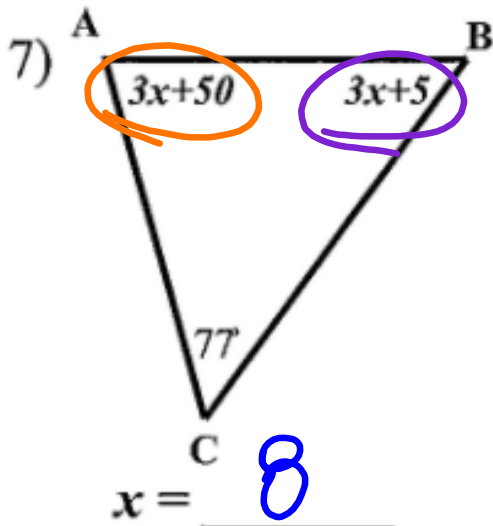
$$\angle C = \underline{2 \cdot 30 + 20 = 60 + 20 = 80^\circ}$$

$$\underline{40 + 2x + 20 + 2x} = 180$$

$$\begin{array}{r} 60 + 4x = 180 \\ -60 \qquad -60 \end{array}$$

$$\frac{4x}{4} = \frac{120}{4}$$

$$x = 30$$



$$77 + 3x + 50 + 3x + 5 = 180$$

$$6x + 132 = 180$$

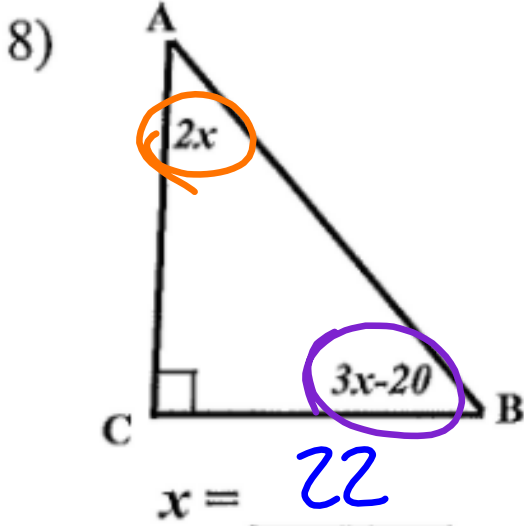
$$-132 \quad -132$$

$$\frac{6x}{6} = \frac{48}{6}$$

$$x = 8$$

$$\angle A = \underline{3 \cdot 8 + 50 = 24 + 50 = 74^\circ}$$

$$\angle B = \underline{3 \cdot 8 + 5 = 24 + 5 = 29^\circ}$$



$$2x + 3x - 20 + 90 = 180$$

$$5x + 70 = 180$$

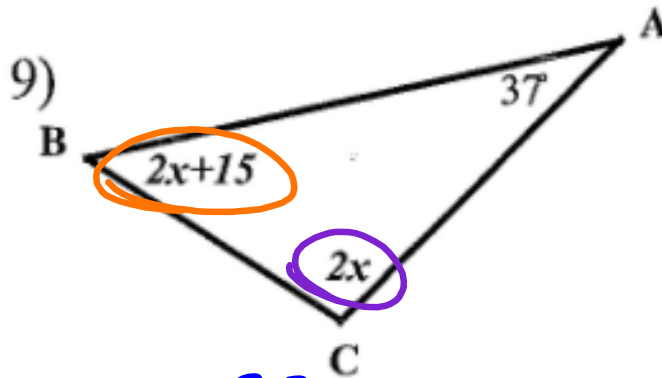
$$-70 \quad -70$$

$$\frac{5x}{5} = \frac{110}{5}$$

$$x = 22$$

$$\angle A = \underline{2 \cdot 22 = 44^\circ}$$

$$\angle B = \underline{3 \cdot 22 - 20 = 66 - 20 = 46^\circ}$$



$$x = \underline{32}$$

$$\angle B = \underline{2 \cdot 32 + 15} = 64 + 15 = 79^\circ$$

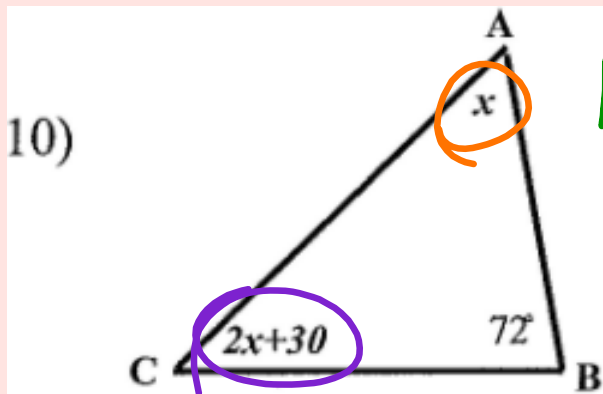
$$\angle C = \underline{2 \cdot 32} = 64^\circ$$

$$\underline{37} + \underline{2x} + \underline{15} + \underline{2x} = 180$$

$$\begin{array}{r} 52 + 4x = 180 \\ -52 \quad -52 \end{array}$$

$$\frac{4x}{4} = \frac{128}{4}$$

$$x = 32$$



$$x = \underline{26}$$

$$\angle A = \underline{26^\circ}$$

$$\angle C = \underline{2 \cdot 26 + 30} = 52 + 30 = 82^\circ$$

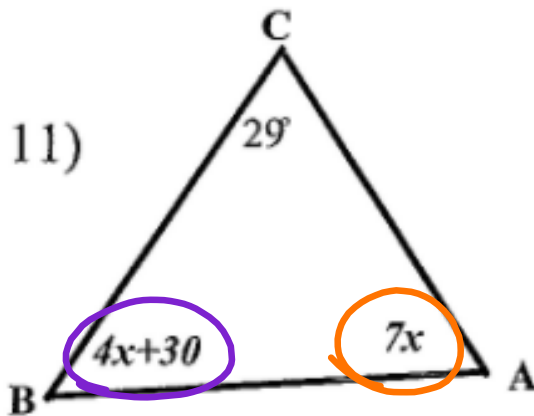
$$\underline{2x} + \underline{30} + \underline{72} + \underline{x} = 180$$

$$\begin{array}{r} 3x + 102 = 180 \\ -102 \quad -102 \end{array}$$

$$\frac{3x}{3} = \frac{78}{3}$$

$$x = 26$$

11)



$x = \underline{11}$

$\angle A = \underline{7 \cdot 11 = 77^\circ}$

$\angle B = \underline{4 \cdot 11 + 30 = 44 + 30 = 74^\circ}$

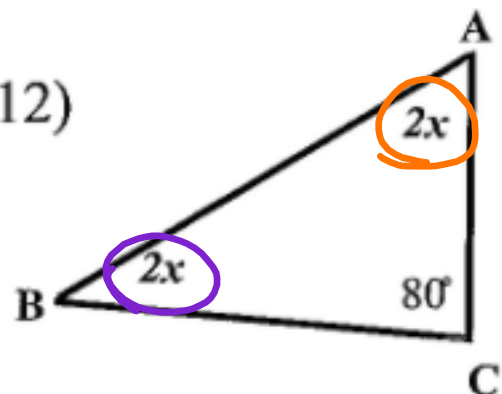
$$\underline{29} + \underline{4x} + \underline{30} + \underline{7x} = 180$$

$$\begin{array}{r} 59 + 11x = 180 \\ -59 \quad \quad -59 \end{array}$$

$$\frac{11x}{11} = \frac{121}{11}$$

$$x = 11$$

12)



$x = \underline{25}$

$\angle A = \underline{2 \cdot 25 = 50^\circ}$

$\angle B = \underline{2 \cdot 25 = 50^\circ}$

$$\underline{2x} + \underline{2x} + 80 = 180$$

$$\begin{array}{r} 4x + 80 = 180 \\ -80 \quad \quad -80 \end{array}$$

$$\frac{4x}{4} = \frac{100}{4}$$

$$x = 25$$