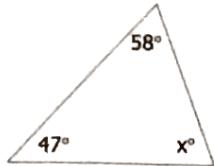


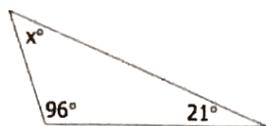
# Worksheet Triangle Sum and Exterior angle Theorem

**I. Find the value of "x".**

1)  $x = \underline{75}$



2)  $x = \underline{63}$

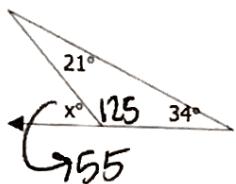


Name MRS. MCLEAN 11  
Period PACW on  
Date 3.5.19

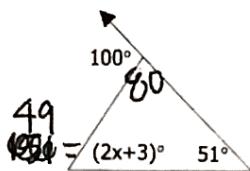
3)  $x = \underline{20}$

$$\begin{aligned} (3x-1)^\circ &= 59 \\ 3x &= 60 \\ x &= 20 \end{aligned}$$

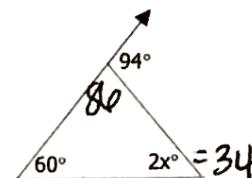
4)  $x = \underline{55}$



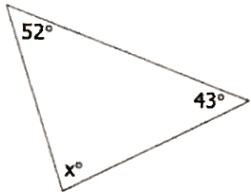
5)  $x = \underline{23}$



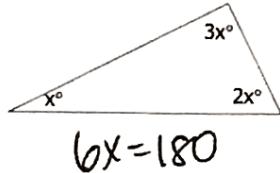
6)  $x = \underline{17}$



7)  $x = \underline{85}$



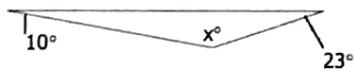
8)  $x = \underline{30}$



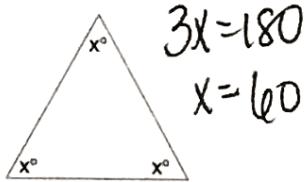
9)  $x = \underline{29}$

$$\begin{aligned} 90^\circ + (2x-2)^\circ + x + 5^\circ &= 180^\circ \\ 3x + 93 &= 180 \\ 3x &= 87 \\ x &= 29 \end{aligned}$$

10)  $x = \underline{147}$



11)  $x = \underline{60}$



12)  $x = \underline{27}$

$$\begin{aligned} 6x + 18 &= 180 \\ 6x &= 162 \\ x &= 27 \end{aligned}$$

**II. Find the measure of each angle.**

13)  $\angle 1 = 112^\circ$     14)  $\angle 2 = 68^\circ$     15)  $\angle 3 = 90^\circ$

16)  $\angle 4 = 90^\circ$     17)  $\angle 5 = 22^\circ$     18)  $\angle 6 = 158^\circ$

