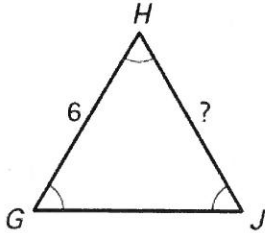


## 4.2 Isosceles & Equilateral Triangles

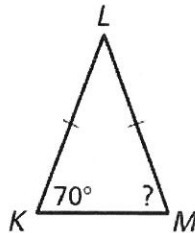
### Classwork

Find the unknown measure.

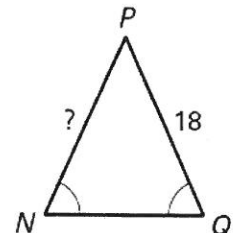
5.



6.

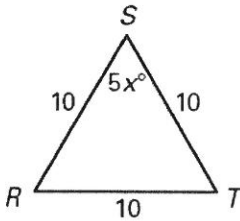


7.

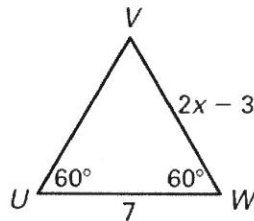


Find the value of  $x$ .

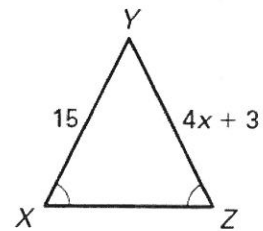
8.



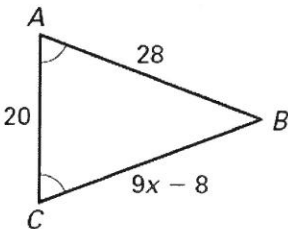
9.



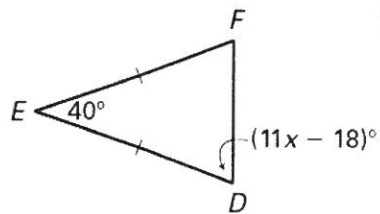
10.



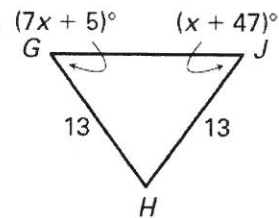
11.



12.

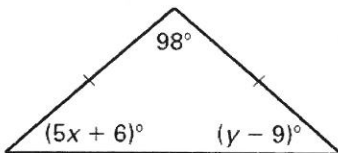


13.

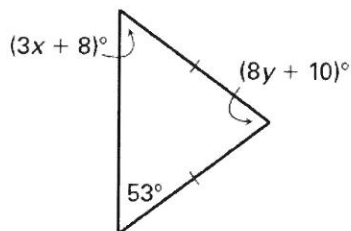


Find the values of  $x$  and  $y$ .

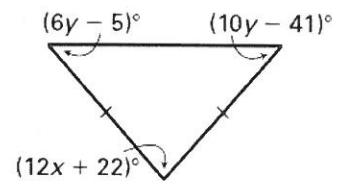
14.



15.

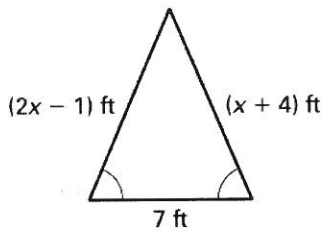


16.

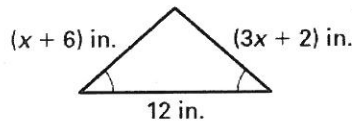


Find the perimeter of the triangle.

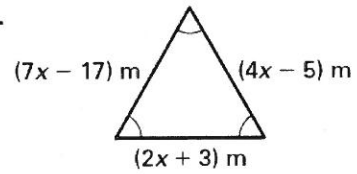
17.



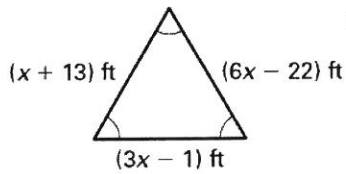
18.



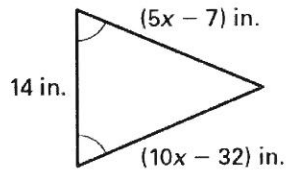
19.



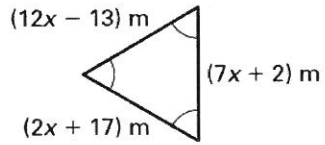
20.



21.

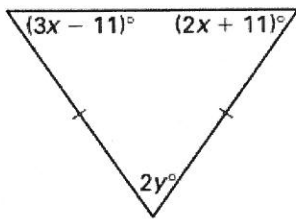


22.

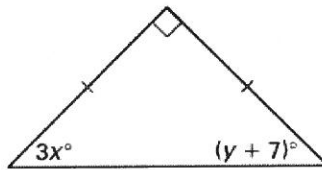


Find the values of  $x$  and  $y$ .

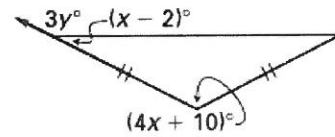
1.



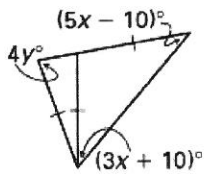
2.



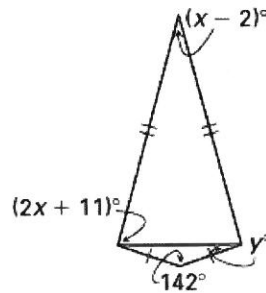
3.



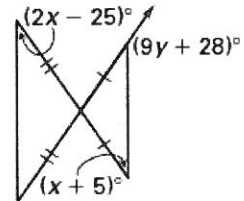
4.



5.



6.

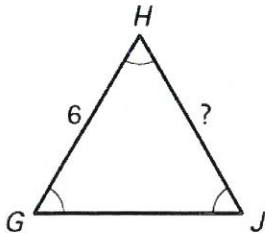


## 4.2 Isosceles & Equilateral Triangles

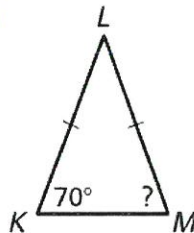
### Classwork

Find the unknown measure.

5.

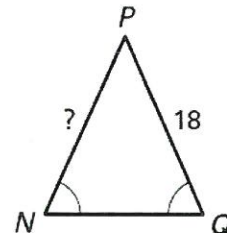


6.



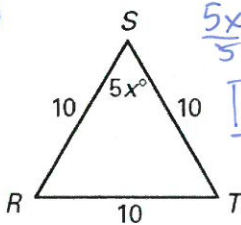
$$m\angle M = 70^\circ$$

7.



Find the value of x.

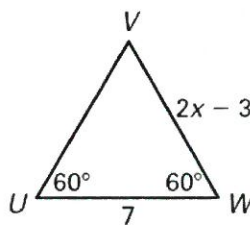
8.



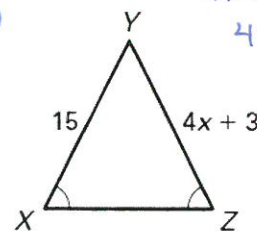
$$\frac{5x = 60}{5} = \frac{60}{5}$$

$$x = 12$$

9.



10.

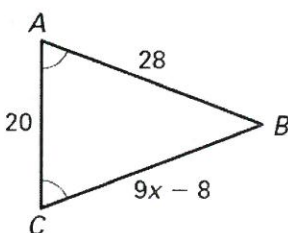


$$4x + 3 = 15$$

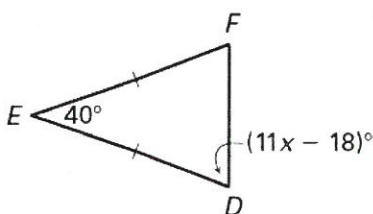
$$4x = 12$$

$$x = 3$$

11.



12.

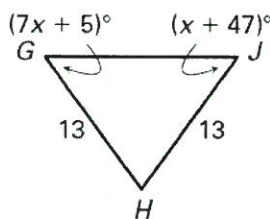


$$11x - 18 = 70$$

$$11x = 88$$

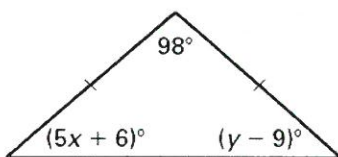
$$x = 8$$

13.



Find the values of x and y.

14.



$$5x + 6 = 41$$

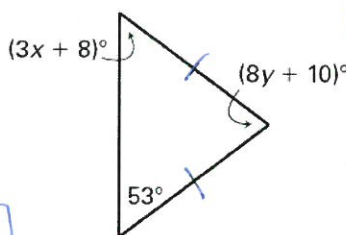
$$5x = 35$$

$$x = 7$$

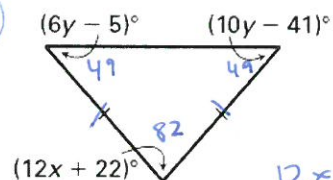
$$y - 9 = 41$$

$$y = 50$$

15.



16.



$$6y - 5 = 10y - 41$$

$$36 = 4y$$

$$y = 9$$

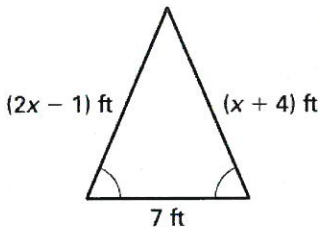
$$12x + 22 = 82$$

$$12x = 60$$

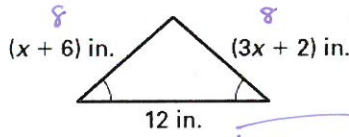
$$x = 5$$

Find the perimeter of the triangle.

17.

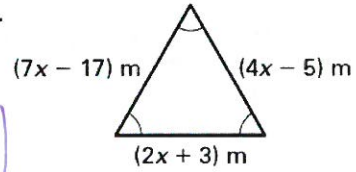


18.

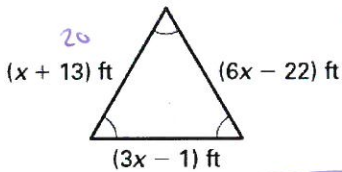


$$\begin{aligned} x+6 &= 3x+2 \\ 4 &= 2x \\ x &= 2 \end{aligned} \quad \boxed{P=28}$$

19.

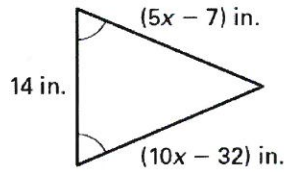


20.

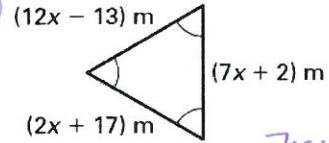


$$\begin{aligned} x+13 &= 3x-1 \\ 14 &= 2x \\ x &= 7 \end{aligned} \quad \boxed{P=60}$$

21.



22.

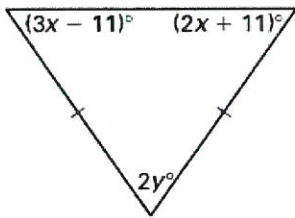


$$\boxed{P=69}$$

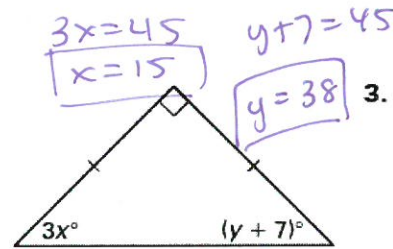
$$\begin{aligned} 7x+2 &= 2x+17 \\ 5x &= 15 \\ x &= 3 \end{aligned}$$

Find the values of  $x$  and  $y$ .

1.

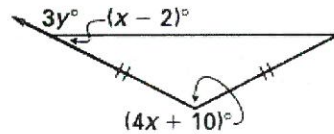


2.

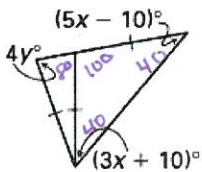


$$\begin{aligned} 3x &= 45 \\ x &= 15 \end{aligned} \quad \begin{aligned} y+7 &= 45 \\ y &= 38 \end{aligned}$$

3.



4.

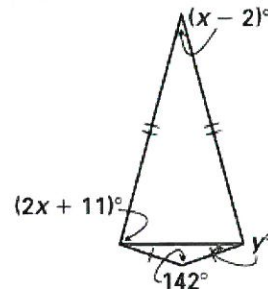


$$5x-10 = 3x+10$$

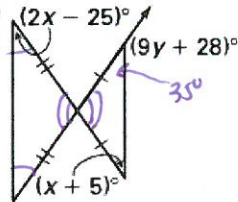
$$2x = 20 \quad \boxed{x=10}$$

$$4y = 80 \quad \boxed{y=20}$$

5.



6.



$$2x-25 = x+5$$

$$\boxed{x=30}$$

$$9y+28+35=180$$

$$9y+28=145$$

$$9y=117$$

$$\boxed{y=13}$$