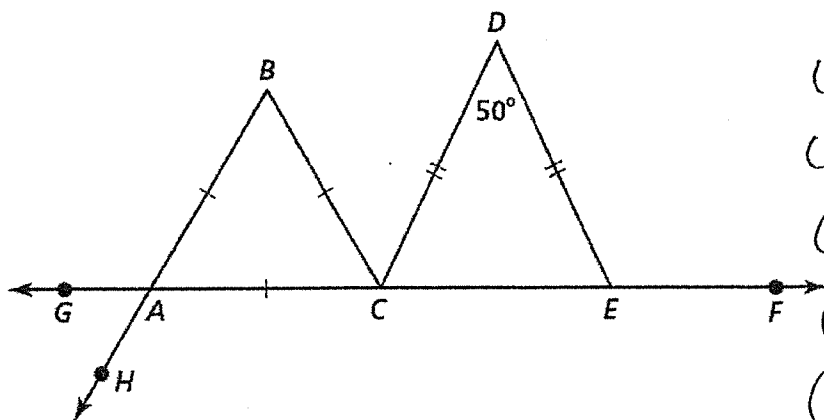


4-6 Isosceles and Equilateral Triangles Worksheet

Use the figure to find the measure of each angle.

1.



(a) $m\angle BCA$

(b) $m\angle DCE$

(c) $m\angle DEF$

(d) $m\angle BCD$

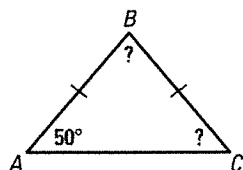
(e) $m\angle BAG$

(f) $m\angle GAH$

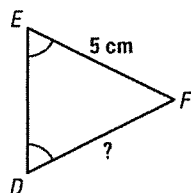
2. Is every equilateral triangle isosceles?
Is every isosceles triangle equilateral?
Explain your reasoning.

Find the unknown measures.

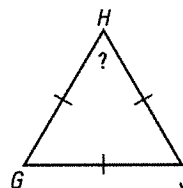
3.



4.

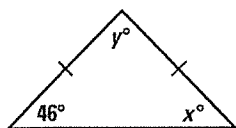


5.

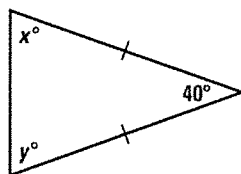


Solve for x and y.

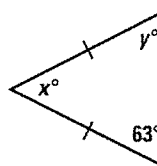
6.



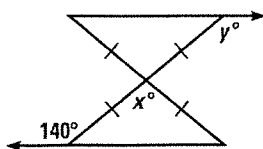
7.



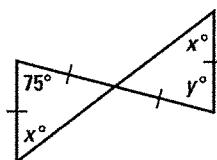
8.



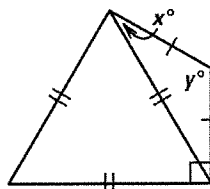
9.



10.

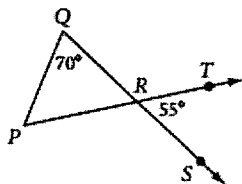


11.

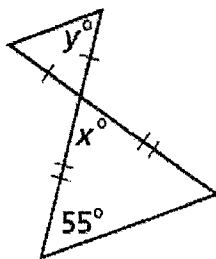


12.

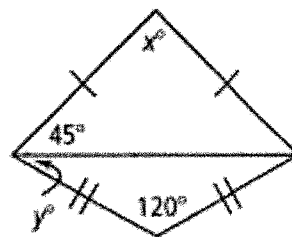
Use the diagram to explain why $\triangle PQR$ is isosceles.



13.

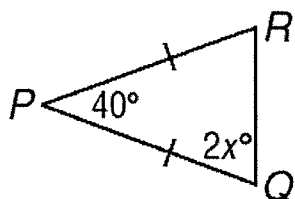


14.

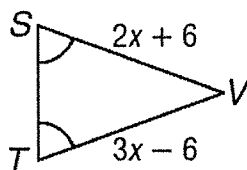


Find the value of the missing variables.

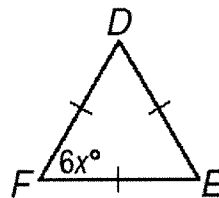
15.



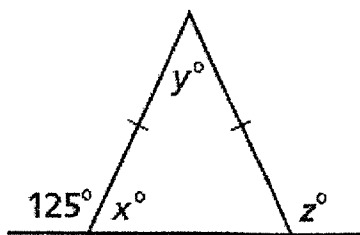
16.



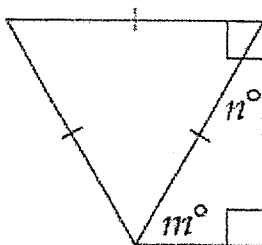
17.



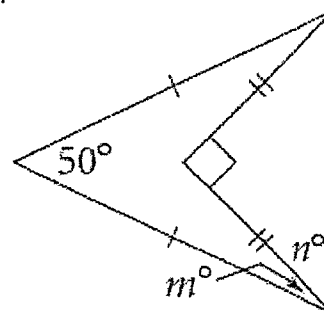
18.



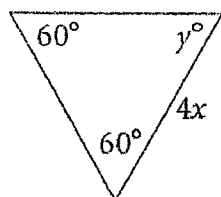
19.



20.



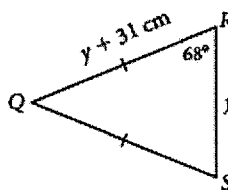
21.



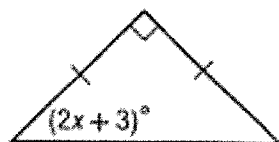
Perimeter is 54.

22.

The perimeter of $\triangle QRS$ is 344 cm. $m\angle Q = \underline{\hspace{2cm}}$,
 $QR = \underline{\hspace{2cm}}$



23.



24.

