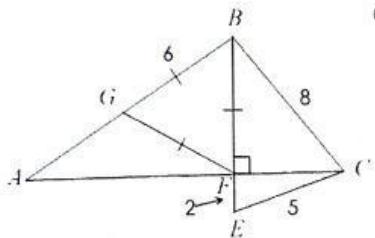




Unit 4 Test Geometry: Congruent Triangles Classifying and Solving for Sides/Angles

Name: _____ Date: _____ Pd: _____

Directions: If G is the midpoint of \overline{AB} , classify each triangle by its angles and sides.



1. ΔCFE : _____, _____
2. ΔBEC : _____, _____
3. ΔBFG : _____, _____
4. ΔGAF : _____, _____

Find all missing angles for #6-7

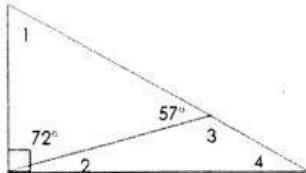
6.

$$m\angle 1 = \underline{\hspace{2cm}}$$

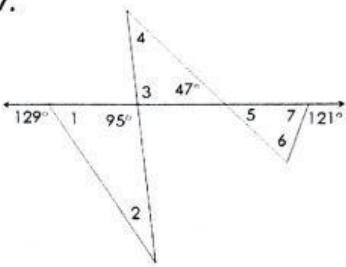
$$m\angle 2 = \underline{\hspace{2cm}}$$

$$m\angle 3 = \underline{\hspace{2cm}}$$

$$m\angle 4 = \underline{\hspace{2cm}}$$



7.



$$\begin{aligned}m\angle 1 &= \underline{\hspace{2cm}} \\m\angle 2 &= \underline{\hspace{2cm}} \\m\angle 3 &= \underline{\hspace{2cm}} \\m\angle 4 &= \underline{\hspace{2cm}} \\m\angle 5 &= \underline{\hspace{2cm}} \\m\angle 6 &= \underline{\hspace{2cm}} \\m\angle 7 &= \underline{\hspace{2cm}}\end{aligned}$$

8. Solve for x .

$$(13x + 2)^\circ + (3x - 4)^\circ = (5x - 7)^\circ$$

$$16x + 2 - 4 = 5x - 7$$

$$16x - 2 = 5x - 7$$

$$11x = -5$$

$$x = -\frac{5}{11}$$

Extra Credit

5. If $W(-10, 4)$, $X(-3, -1)$, and $Y(-5, 11)$ classify ΔWXY by its sides. Show all work to justify your answers.

ΔWXY is _____

$$WX = \underline{\hspace{2cm}}$$

$$XY = \underline{\hspace{2cm}}$$

$$WY = \underline{\hspace{2cm}}$$