

Unit 4: Congruent Triangles
Homework 2: Angles of Triangles

Name: _____ Bell: _____
Date: _____

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Directions: Find all missing angles.

1.



$$m\angle 1 = 45^\circ$$

2.



$$m\angle 1 = 50^\circ$$

3.



$$m\angle 1 = 37$$

4.



$$\begin{aligned} m\angle 1 &= 88^\circ \\ m\angle 2 &= 47^\circ \\ m\angle 3 &= 113^\circ \end{aligned}$$

5.



$$\begin{aligned} m\angle 1 &= 62^\circ \\ m\angle 2 &= 45^\circ \\ m\angle 3 &= 44^\circ \end{aligned}$$

6.



$$\begin{aligned} m\angle 1 &= 100^\circ \\ m\angle 2 &= 57^\circ \\ m\angle 3 &= 47^\circ \\ m\angle 4 &= 132^\circ \\ m\angle 5 &= 41^\circ \end{aligned}$$

7.



$$\begin{aligned} m\angle 1 &= 111^\circ \\ m\angle 2 &= 55^\circ \\ m\angle 3 &= 95^\circ \\ m\angle 4 &= 85^\circ \\ m\angle 5 &= 36^\circ \\ m\angle 6 &= 49^\circ \\ m\angle 7 &= 106^\circ \end{aligned}$$

Directions: Find the value of x .

8.



9.



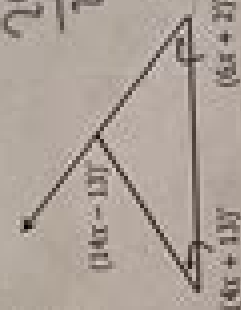
$$\begin{aligned} (3x-5) + (x+5) + 17 &= 180 \\ 10x &= 180 \\ 10x - x &= 180 - 90 \\ 9x &= 90 \\ x &= 90/9 \\ x &= 10 \end{aligned}$$

10.



$$\begin{aligned} 180 - 151 &= 29 \\ 11x - 1 + 3x + 17 &= 29 \\ 14x + 16 &= 29 \\ 14x &= 29 - 16 \\ 14x &= 13 \\ x &= 13/14 \end{aligned}$$

11.



$$\begin{aligned} (14x-13) + (4x+13) + 24 &= 180 \\ 18x &= 180 \\ 18x - 18x &= 180 - 36 \\ 0 &= 144 \\ x &= 144/18 \\ x &= 8 \end{aligned}$$

Evaluating Congruent Triangles Unit 4 Lesson

J Ma



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