

# Geometry 4.1 - 4.2 Practice

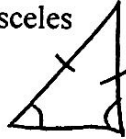
Name: \_\_\_\_\_

#1-3. Sketch an example of each triangle. Use appropriate markings to indicate equal sides or angles.

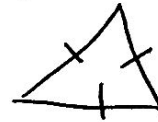
1. Scalene



2. Isosceles



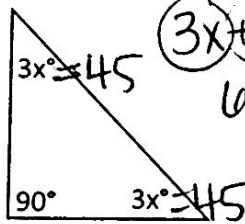
3. Equilateral



4 - 6 \* bottom

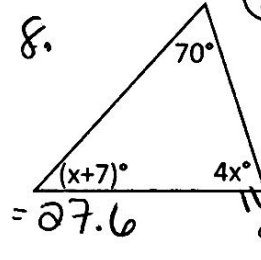
7-10 Find the interior angle measures of the triangles.

7.



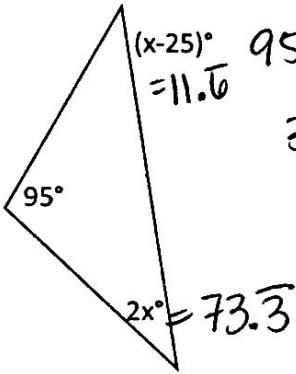
$$\begin{aligned} 3x + 3x + 90 &= 180 \\ 6x + 90 &= 180 \\ -90 & \quad -90 \\ 6x &= 90 \\ \frac{6x}{6} &= \frac{90}{6} \\ x &= 15 \end{aligned}$$

8.



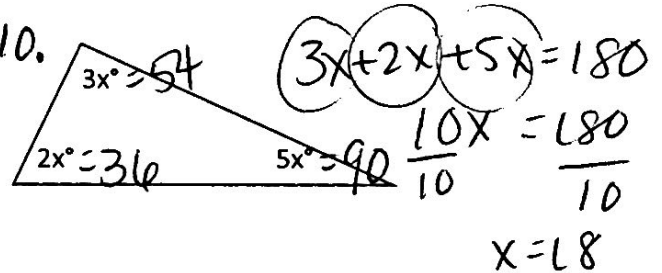
$$\begin{aligned} x + 7 + 4x + 70 &= 180 \\ 5x + 77 &= 180 \\ -77 & \quad -77 \\ 5x &= 103 \\ \frac{5x}{5} &= \frac{103}{5} \\ x &= 20.6 \end{aligned}$$

9.



$$\begin{aligned} 95 + 2x + x + 25 &= 180 \\ 3x + 120 &= 180 \\ -120 & \quad -120 \\ 3x &= 60 \\ \frac{3x}{3} &= \frac{60}{3} \\ x &= 20 \end{aligned}$$

10.



$$\begin{aligned} 3x + 2x + 5x &= 180 \\ 10x &= 180 \\ \frac{10x}{10} &= \frac{180}{10} \\ x &= 18 \end{aligned}$$

11. What type of triangle has the angle measures 50°, 60°, 70°?

acute

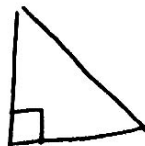
12. What type of triangle has the angle measures 140°, 10°, 30°?

obtuse

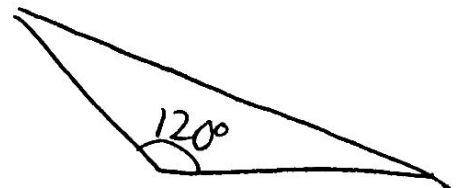
4. acute



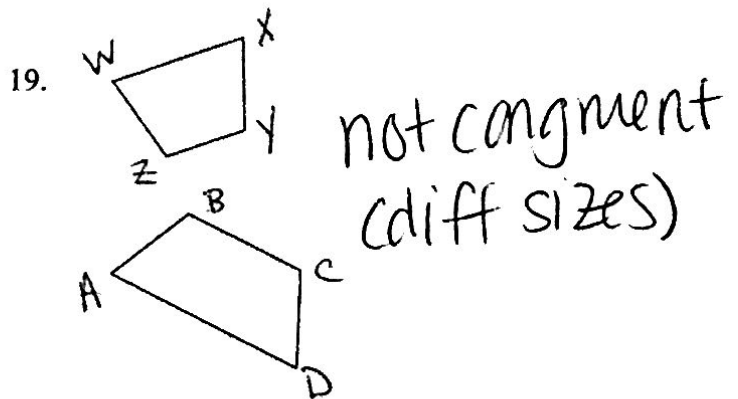
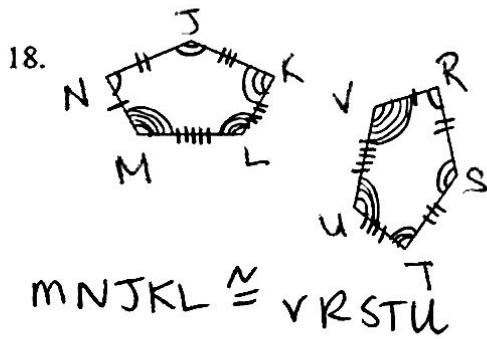
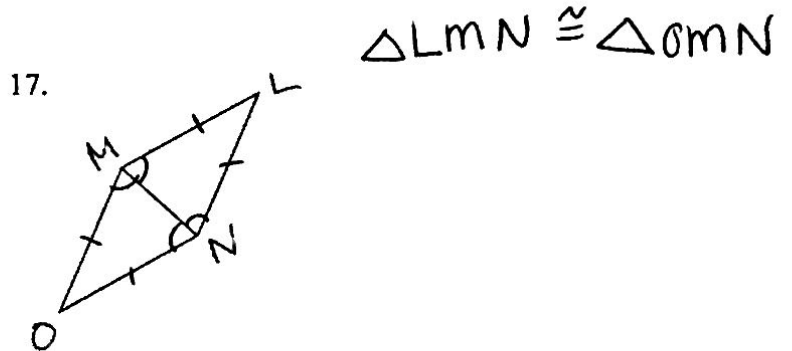
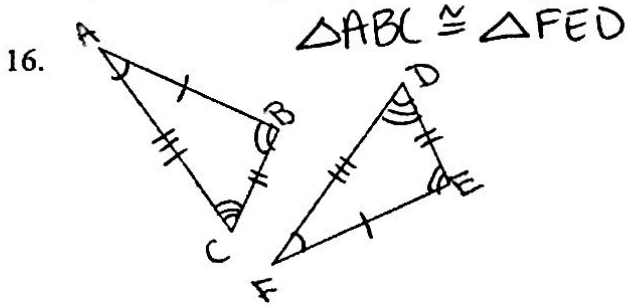
5. right



6. obtuse



#16-19. Identify all pairs of congruent corresponding parts. Write a congruence statement for the shape. If not congruent, write not congruent.



#20-21. Use the third angles theorem to find the value of x.

