

Name: _____

Period: _____

6.5 Practice: Indirect Proof and Inequalities in Triangles

1) Use indirect proof to show that if $WV + VU \neq 12in$ and $VU = 5in$, then $WV \neq 7in$.

2) In $\triangle ABC$, if $m\angle A = 100^\circ$, then $\angle B$ is not a right angle.

3) In $\triangle JKL$, if M is the midpoint of \overline{KL} , then \overline{JM} is a median.

4) Can you make a triangle with the given side lengths?

13, 20, 7

3.2, 3.2, 0.1

$\sqrt{1}, \sqrt{2}, \sqrt{3}$

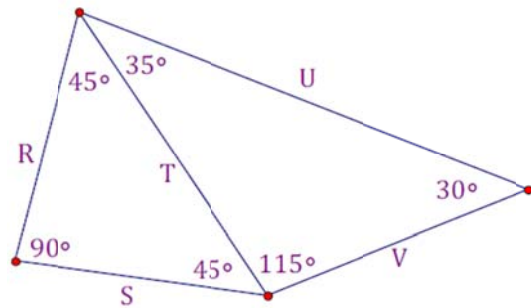
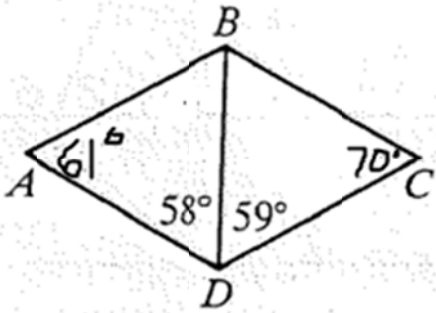
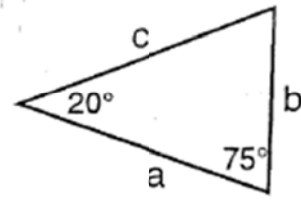
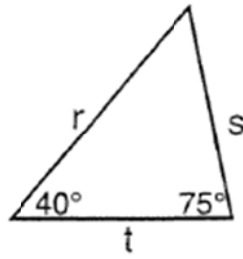
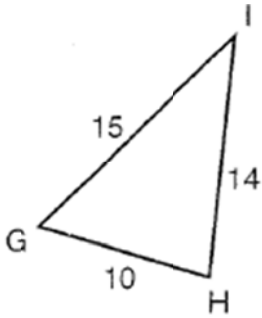
3x, 4x, 10x

5) Find the range of possible side lengths for the third side of a triangle given two sides in the form $___ < x < ___$.

10, 15

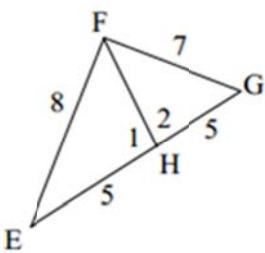
9, 9

6) Indicate the largest side (if given angles) or angle (if given sides).

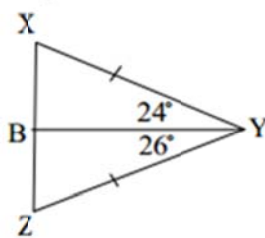


7) Which side or angle is larger?

$m\angle 1, m\angle 2$



$\overline{XB}, \overline{ZB}$



$\overline{KP}, \overline{KG}$

