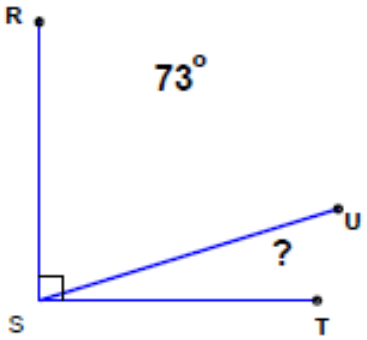
Name:_____

Date:_____ Period:_____

Review – Geometric Properties

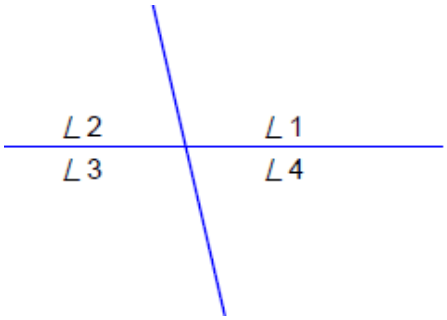
Find the missing angle(s).

1.



Angle = _____

2.



∠1 = 103°

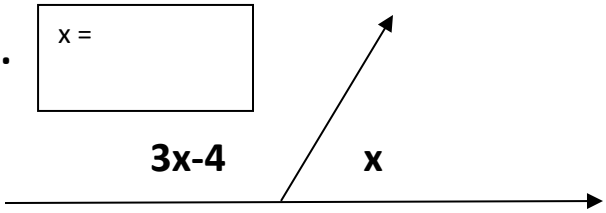
∠2 = 77°

∠3 = _____

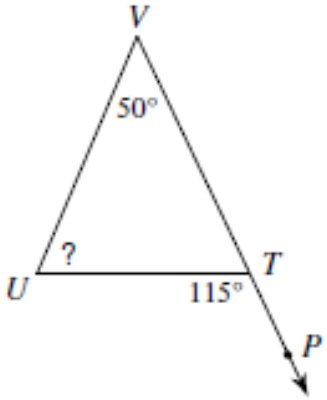
∠4 = _____

3.

x =



4.



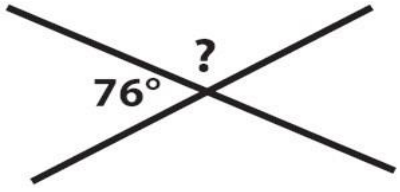
a) Missing angle measure:

b) Name the triangle (based on the angles):

5. Two angles are supplementary. The larger angle exceeds twice the smaller angle by 30°. Find the angles.

Smaller Angle: _____ **Larger Angle: _____**

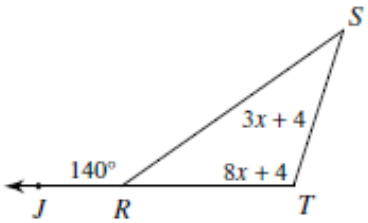
6.



Solve for x.

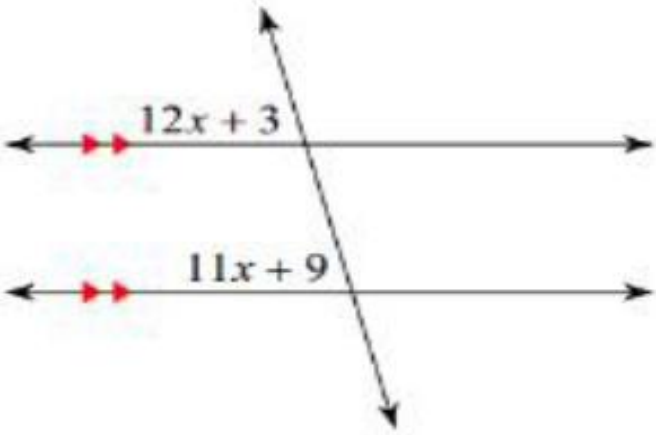
x =

7.



a) Measure of angle S =

b) Name the triangle (by angles):



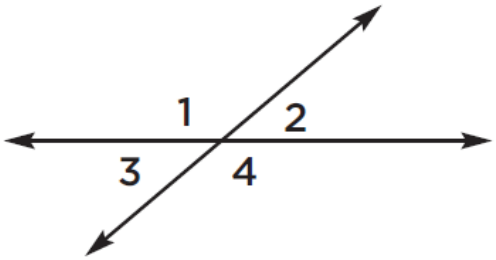
8. What is the relationship between these angles?

9. Solve for x. x =

10. What is the measure of each angle given?

12x+3 = _____ 11x+9 = _____

Use the figure on the right to answer each question below.



11. Angle 1 is called a _____ angle.

a. Acute b. Obtuse c. Right d. Straight

12. Angle 2 is called a _____ angle.

a. Acute b. Obtuse c. Right d. Straight

13. Angles 2 and 3 are called _____ angles.

a. Complementary b. Supplementary c. Vertical d. Adjacent

14. If the measure of angle 1 was 130°, what would the measure of angle 2 be? _____

a. 130° b. 50° c. 20° d. 90°

15. If the measure of angle 3 was 70°, what would the measure of angle 2 be? _____

a. 70° b. 20° c. 50° d. 90°

Identify (circle YES or NO) whether the three angles given would create triangle. Give a reason to support your answer.

16. 25°, 75°, 85° YES or NO Reason: _____

17. 50°, 30°, 100° YES or NO Reason: _____

18. If two sides of a triangle are 1 cm and 3 cm, the third side may be…

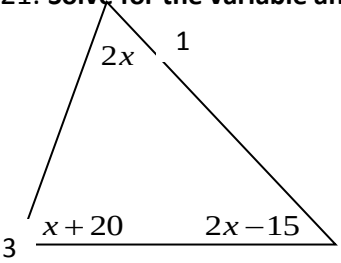
(a) 5 cm (b) 2 cm (c) 3 cm (d) 4 cm

19. Based on the side lengths, name the triangle from Question 18. _____

20. If the lengths of two sides of a triangle are 5 in and 7 in, the length of the third side may ***not*** be…

(a) 12 in (b) 7 in (c) 3 in (d) 5 in

21. **Solve for the variable and use it to identify the missing angle measures of each triangle.**



Angle 1 = _____ Angle 2 = _____ Angle 3 = _____