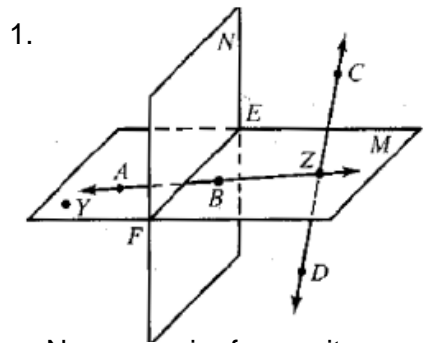


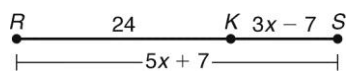
**1<sup>st</sup> Quarter Common Assessment Review**



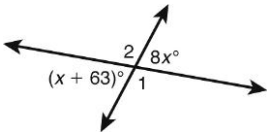
1.
  - a. Name a pair of opposite rays.
  - b. Give another name for plane *M*.
  - c. Line *CD* intersects plane *M* at \_\_\_\_\_.

2. The midpoint of  $\overline{XY}$  is *Z*. If  $XY = 4n$  and  $XZ = n + 16$ , what is  $YZ$ ?

3. What is  $KS$ ?



4. What is  $m\angle 1$ ?



5. The measures of two complementary angles are  $(3x - 10)^\circ$  and  $(6x + 10)^\circ$ . What is the measure of the smaller angle?

6. What is the distance from  $(6, 1)$  to  $(3, -13)$  on the coordinate plane?

$$d = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

7. What are the coordinates of the image of  $K(-8, 7)$  after the translation  $(x, y) \rightarrow (x - 10, y + 2)$ ?

8. Which transformation (reflection, rotation, or translation) maps  $T(6, 3)$  to  $T'(-6, 3)$ ?

9. Give a counterexample that shows why this statement is false.

*If 2 lines intersect, then they are perpendicular.*

10. Write the converse, inverse, and contrapositive of the following statement and determine the truth value of each: "If it's raining, then it's cloudy"

CV:

IV:

CP:

11. Given: If you pass geometry with a C, then you can take Algebra 2 next year. Maria passes geometry with a C. What can you conclude?

Name \_\_\_\_\_

Period \_\_\_\_\_

12. Given: If a parallelogram has at least one right angle, then all four angles are right. If all four angles of a parallelogram are right angles, then the parallelogram is a rectangle. What can you conclude?

13. Write a biconditional from the following conditional statement. Then determine the truth value of the biconditional:  
"If two noncoplanar lines do not intersect, then they are parallel"

14. Justify each of the following statements with a property:

- a. If  $6k - 9 = 20$ , then  $6k = 29$
- b. If  $2y = n$  and  $n = -3$ , then  $2y = -3$
- c.  $\angle A \cong \angle A$

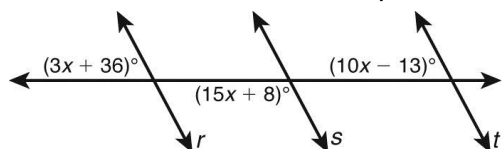
15. Complete the following proof:

**Given:**  $m\angle 1 = m\angle 2$ ,  $m\angle 1 = 90^\circ$

**Prove:**  $\angle 2$  is a right angle.

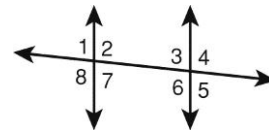
Statements	Reasons
1. $m\angle 1 = m\angle 2$ , $m\angle 1 = 90^\circ$	1.
2. $90^\circ = m\angle 2$	2.
3. $\angle 2$ is a rt. $\angle$ .	3. _

16. If  $x = 7$ , which lines must be parallel?

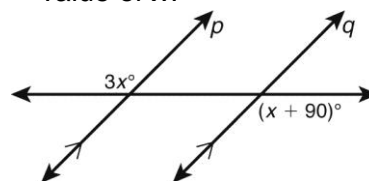


17. Identify a pair of angles in the picture that are:

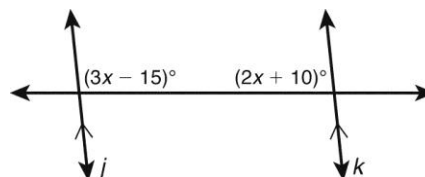
- a. alternate interior
- b. same-side interior
- c. corresponding
- d. vertical
- e. alternate exterior



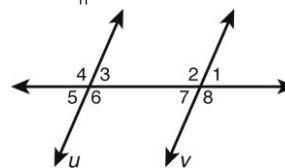
18. If lines  $p$  and  $q$  are parallel, what is the value of  $x$ ?



19. If  $j \parallel k$ , find  $x$ .



20. Which angle must be congruent to  $\angle 6$  to prove that  $u \parallel v$ ?



21. In the figure,  $\angle ABD \cong \angle CBD$ . What is the value of  $x$ ?

