Review: **COMMON ASSESSMENT 1**

NAME: _____ DATE: _____ PERIOD: _____

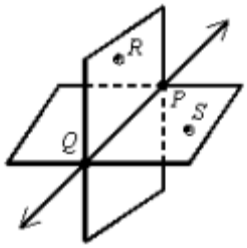
For #1 – 19, match the term with the description that best fits..

1. _____	An exact location in space with indefinite size and shape.	a. Midpoint
2. _____	An object with no thickness that extends infinitely in 2 directions.	b. Complementary Angles
3. _____	A figure formed by two rays that have the same endpoint.	c. Obtuse Angle
4. _____	Flat surface extending infinitely in all directions.	d. Proof
5. _____	Points that lie on the same line.	e. Point
6. _____	A ray that divides an angle into two congruent angles	f. Acute Angle
7. _____	Points that lie on the same plane.	g. Coplanar
8. _____	Two angles whose sum of their measures is 90°	h. Vertical Angles
9. _____	An angle with a measure of 180°	i. Angle
10. _____	Two angles whose sum of their measures is 180°	j. Conditional
11. _____	A point that divides a segment into two congruent segments.	k. Line
12. _____	An angle with a measure between 90° and 180°	l. Adjacent Angles
13. _____	Angles whose non-adjacent sides are formed by a pair of intersecting lines.	m. Plane
14. _____	An unproven statement that is based on observation.	n. Conjecture
15. _____	An angle with a measure between 0° and 90°	o. Straight Angle
16. _____	A specific case for which the conjecture is false.	p. Supplementary Angles
17. _____	A logical statement that has two parts, a hypothesis and a conclusion.	q. Counter Example
18. _____	Logical argument that shows a statement is true.	r. Collinear
19. _____	Angles that have a common vertex and side, but share no interior points	s. Angle Bisector

For # 20 – 21, referring to the figure below use appropriate notation to name each of the following:.

20. _____ The intersection of *QPS* and QRP.

21. _____ A point noncoplanar with QPS.

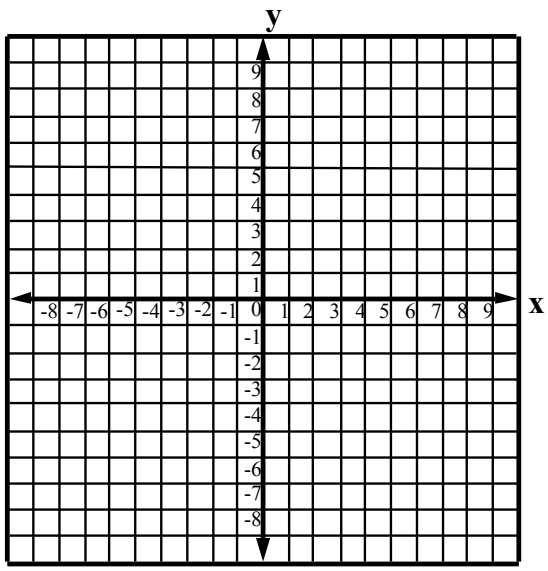


22. d = _____

Midpoint _____

Find the distance between **A**(4, 8) and **B**(-3, -1) on a coordinate plane using either the distance formula or the Pythagorean Theorem. Record the exact answer and the approximate answer rounded to the nearest tenth of a unit.

Find the coordinates of the midpoint of the segment $\overline{AB}$.



23. x = _____

RS = _____

ST = _____

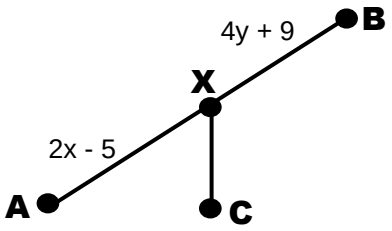
S is between **R** and **T**. If **RS** = 2x – 8, **ST** = 3x -10 and **RT** = 17, Find ***x***, **RS**, and **ST**. (HINT: draw and label a diagram)

24. x = _____

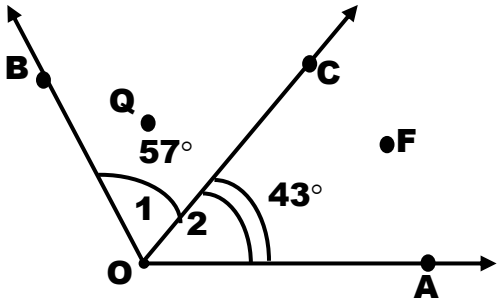
y = _____

XB = _____

If AB **= 5x + 3y = 21, then find** AX **and** XB**.**



For #25 – 27, use the figures to the right.

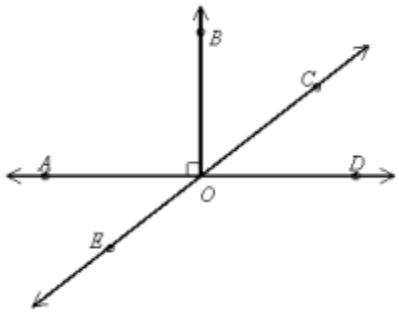


25. _____	Name the vertex of the angles.
26. _____	Name a point in the interior of $\angle COB$.
27. _____	Name the sides of $\angle 2$.

28. x = _____

$m\angle AOC$ = _____

If $m\angle AOE = 6x + 72$, and $m\angle EOD = 2x + 28$, find the value of x, and $m\angle AOC$.



29. For the given statement, write the if-then form, the converse, the inverse, and the contrapositive.

Supplementary angles add to 180°

If-then _____

_____

Converse_____

_____

Inverse_____

_____

Contrapositive_____

_____

30. _____

_____

Based on the pattern, what are the next two terms of the sequence?

$$12, 4, \frac{4}{3}, \frac{4}{9}, \ldots.$$

31. _____ Based on the pattern, what is the next figure of the sequence?

For # 32 – 34, find a counter example to disprove the conjectures:

32. Complementary angles are adjacent.

33. If the product of two numbers is even, then the two numbers must both be even.

34. The square root of a number x is always less than x.

35. Find the measure of an angle if its measure is triple the difference of 60° and its supplement.

Equation = _____

$m\angle X^\circ$ = _____

$m\angle Y^\circ$ = _____

36. Given: 24 + 3(2x + 13) = -15x
Prove: x = -3

Statements	Reasons
1. 24 + 3(2x + 13) = -15x	1. Given
2. 24 + 6x + 39 = -15x	2.
3.	3. Simplify
4. 21x = -63	4.
5. x = -3	5. Division Property of Equality