GEOMETRY CHAPTER 1 REVIEW	NAME_____
PS1 – BASICS OF GEOMETRY (VERSION 2)	DATE_____ PERIOD_____

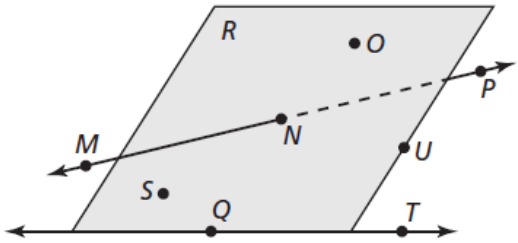
Show ALL work for full credit.

1. Use the diagram at the right.

a. Name three coplanar points that aren't collinear.

b. Give two names for the line containing point N.

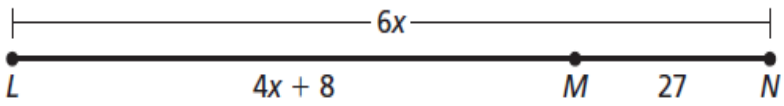
c. Name a line that is coplanar with plane R.



2. Let B be between A and C. Use the Segment Addition Postulate to solve for y. Then find the lengths of AB and BC.

$AB = 3x + 7$
$BC = 2x + 9$
$AC = 36$

3. Solve for x. Then find the desired lengths below.



a.) LM: _____

b.) MN: _____

c.) LN: _____

Find the midpoint between the two given points.

4. (-6, 8) and (8, -10)

5. (13, -6) and (2, 9)

Find the other endpoint of the line segment with the given endpoint and midpoint (M).

6. P(8, -5) and M(-2, -6)

7. H(-9, -7) and M(10, 2)

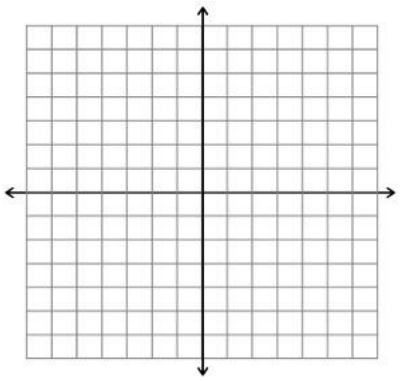
Find the distance between each pair of points. You may leave the answers as radicals if needed.

8. (3, 10) and (4, 7)

9. (-3, -4) and (5, 8)

10. (-2, -7) and (9, 0)

11. Find the perimeter **and** area of the polygon with the given vertices: E(-3, 4), F(2, 1) and G(-3, 1).

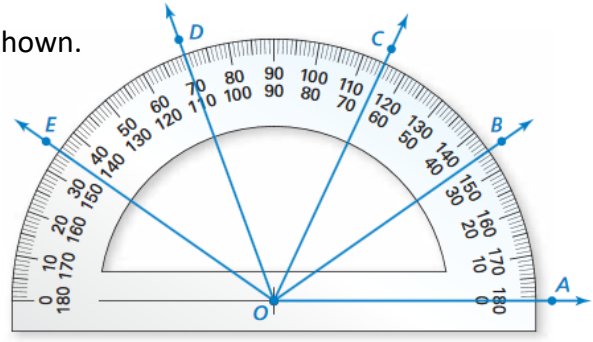


12. Use the diagram to find the measure of the angles shown.

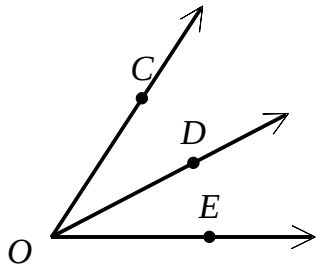
a. ∠EOB

b. ∠EOD

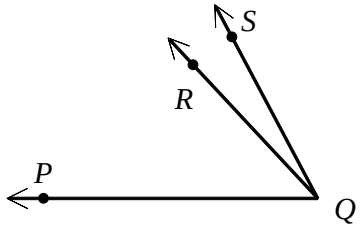
c. ∠AOE



13. If $m\measuredangle DOC = 34$ and $m\measuredangle DOE = 17$, then what is the measure of $\angle COE$?

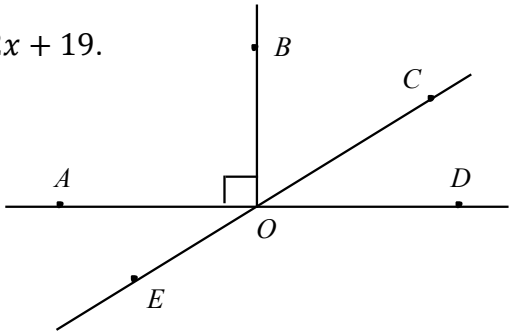


14. If $m\measuredangle PQR = 2x + 10$, $m\measuredangle RQS = 4x - 3$, and $m\measuredangle PQS = 145$ Find $m\angle PQR$ and $m\angle SQR$.



15. Given $\angle 1$ and $\angle 2$ are congruent, $m\measuredangle 1 = 82$, and the $m\measuredangle 1 = 3x + 16$. Solve for x.

16. Solve for x if the $m\measuredangle AOE = 3x + 5$, and $m\measuredangle COD = 2x + 19$.



17. Use the diagram in question 16 above. Name the following using proper notation:

a) A pair of supplementary angles: _____

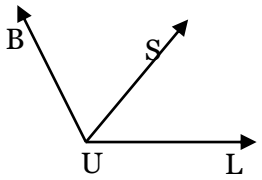
b) A pair of linear pairs: _____

c) An angle that forms a pair of vertical angles with $\measuredangle EOD$: _____

d) A pair of complementary angles: _____

e) An angle that is adjacent to $\measuredangle BOA$: _____

18. $\overrightarrow{US}$ bisects ∠BUL, m∠BUS = 3x +17, and m∠SUL = 5x + 11. Find m∠BUL.



19. ∠1 is the complement of ∠2, and m∠1 = 57°. Find m∠2.

20. ∠ABC and ∠WXY are supplementary angles. If m∠ABC = 2x – 5 and m∠WXY= 3x +10, then find the measures of ∠ABC and ∠WXY.