

Name Key
Math 8R

Date _____
Period _____

Do Now: Vocabulary Review

Part I: Fill in the blanks based on what you recall from our past units of instruction.

Word box:

equal

straight line

intersect

sum

rate of change

exterior angle

positive

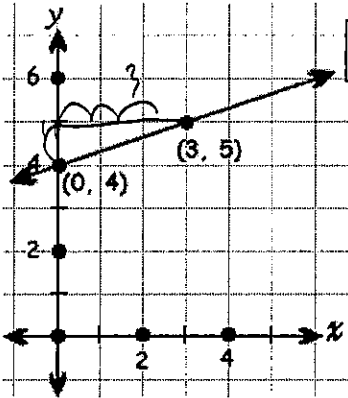
negative

curve

1. Another name for slope is rate of change
2. Vertical angles are equal (congruent) in measure
3. The solution point to a system of linear equations is the point where the two lines intersect
4. The sum of the two non-adjacent interior angles of a triangle is equal to the measure of the exterior angles.
5. If a function is linear, the graph looks like a straight line
6. If a function is increasing it has a positive slope.

Part II: Answer the questions below based on the vocabulary above and your knowledge of mathematics.

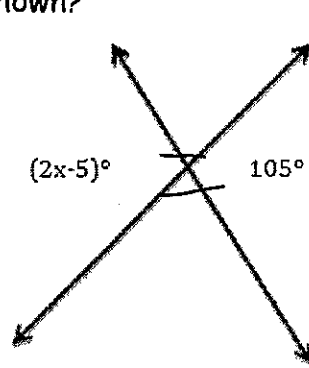
1) What is the rate of change of line l shown in the accompanying diagram?



$$m = \frac{\text{rise}}{\text{run}}$$

$$m = \frac{1}{3}$$

2) What is the value of x in the diagram shown?

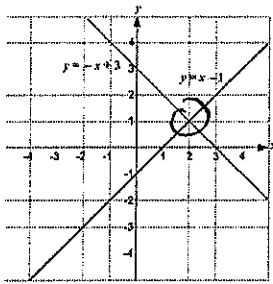


Vertical angle
(Congruent / =)

$$\begin{aligned} 2x - 5 &= 105 \\ +5 & \quad +5 \\ \hline 2x &= 110 \\ \frac{2x}{2} & \quad \frac{110}{2} \end{aligned}$$

$$x = 55$$

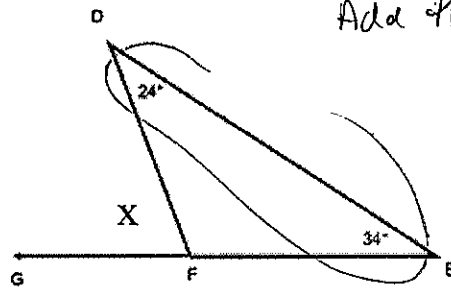
3) Which ordered pair is a solution to the system of equations shown below?



where they intersect

$$(2, 1)$$

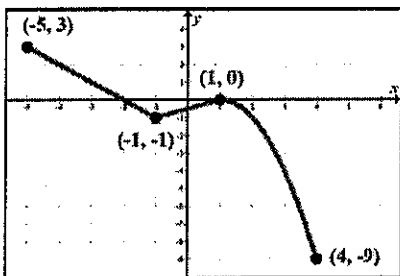
4) Find the value of x in the diagram shown.



Add the 2 interior angles

$$\begin{aligned} x &= 24 + 34 \\ x &= 58 \end{aligned}$$

5) In which interval is the graph below linear and increasing?



straight line

positive slope

a) from $x = -5$ to $x = -1$

b) from $x = -1$ to $x = 1$

c) from $x = 1$ to $x = 4$

d) from $x = -5$ to $x = 4$