Na	ame: Date:
	Lesson 3 Assessment
1.	Determine the equation of the line between the points $(4, 3)$ and $(12, -3)$. Write your answer in slope-intercept form $f(x) = mx + b$.
2.	The function $P(n) = 455n - 1820$ represents a computer manufacturer's profit when n

a) Identify the vertical intercept. Write it as an ordered pair and interpret its practical meaning in a complete sentence.

Ordered Pair:_____

b) Determine the horizontal intercept. Write it as an ordered pair and interpret its practical meaning in a complete sentence.

Ordered Pair:_____

3. Determine the equation of the vertical line passing through the point (4, 7).

4. The *x*-axis is a line. Write the equation of this line.

5. Fill in the table below. Intercepts <u>must</u> be written as ordered pairs. Write "N" if your answer does not exist (is undefined).

 $I = Increasing \qquad \qquad D = Decreasing \qquad \qquad C = Constant (Horizontal) \qquad \qquad V = Vertical$

Equation	Slope	Vertical Intercept	Horizontal Intercept	Behavior I, D, C, V
y=2x-16				
f(x) = 8 - 3x				
y = -2				
y = x				
	-5	(0, 20)		
		(0, -9)	(-3, 0)	
x = 6				