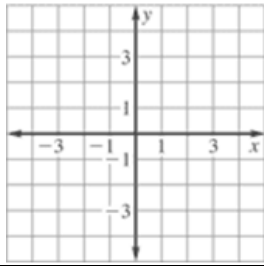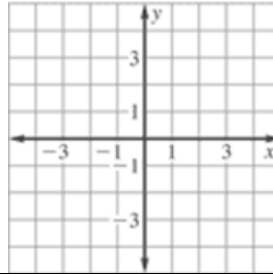Name:_____ Per:_____

Honors I – Chapters 3 & 4 PRACTICE Test   **SHOW ALL YOUR WORK**

1. Graph $y = -3$ and state its slope: _____	2. Graph x = 1 and state its slope: _____

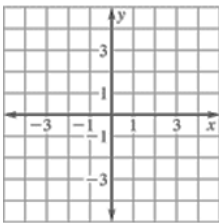Find the slope of the line passing through the points.

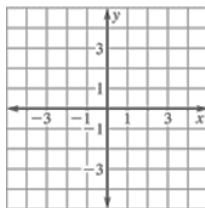| 3. $(2, 9)$ and $(6, 15)$	4. $f(-1) = 4.5$ and $f(-4) = -14.75$	5. $\left(-2, \frac{9}{4}\right)$ and $\left(1, \frac{15}{2}\right)$

Graph each equation.

6. $6x - 3y = -15$	7. $y + 1 = -\frac{1}{3}x$	8. $y + 2 = -\frac{2}{3}(x + 4)$	9. $y = 2x - 1$
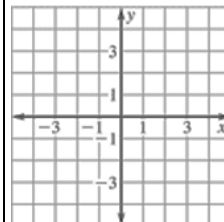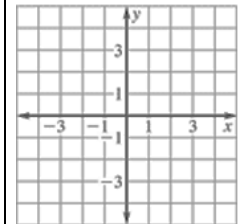
10. Write the equation (in some point-slope form) for the equation of the line that goes through the point (-4, 2) with a slope of 1.5.	11. Write the equation, in slope-intercept form, for the equation of the line that goes through the points (5,0) and (3,7).

12. Find the value of k so that the line passing through the two points has the given slope. $$(3k, 2), (5, 6), \quad m = \frac{2}{7}$$ k = ____	13. Find the value of A and B so the line goes through the point (-5,0) and (0,2). Ax + By = 20 A = _____ and B = _____

14. Find the equation for the line that is parallel to $y = \frac{1}{3}x + 4$ and goes through the point (1, -2).	15. Find the equation for the line that is perpendicular to $y = \frac{1}{3}x + 4$ and goes through the point (1, -2).

16. The cost for a large sno cone at the fair is $4 and the cost for a small sno cone is $2. Let x = number of large cones and y = number of small cones. Write an equation relating the money spent on large and small cones if one has $20 to spend.

Equation: _____

Now, name three different combinations of small and large cones that can be purchased.
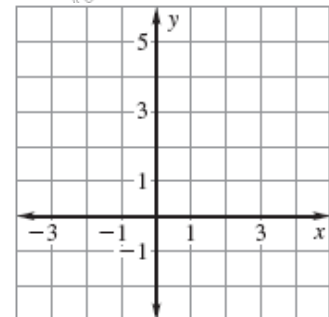
Combination 1: (,   )
Combination 2: (,   )
Combination 3: (,   )

For the problems below, use the table and graph shown to the right.

x	–1	0	1	2	3
y	5	3	2	0	–2

17. Plot the points, draw in a line of best fit and find an equation for **your** line of best fit.

Equation: _____

18. Use your equation to estimate the value of y when x is 20.

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19. Describe whether each graph should produce a positive, negative or no correlation when plotted.	20. The function C(x) = 4 + 1.25x represents the cost for downloading x songs.
a) Graph comparing years of education and entry salary.	Find and interpret each (in real-life terms) below.
b) Graph comparing elevation and oxygen levels.	$C(5) =$
	$C^{-1}(x) =$
c) Graph comparing height and GPA.	$C^{-1}(14) =$