Slope Intercept Form Day 2 Notes

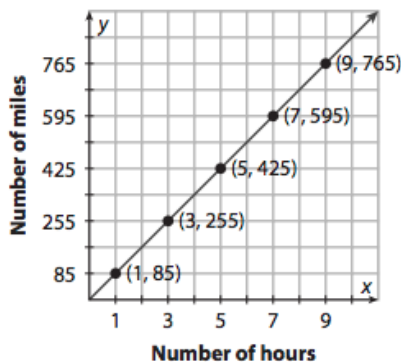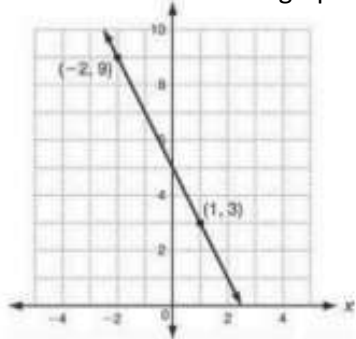| Slope Formula	Slope-Intercept Form
$$m = \dfrac{y_2 - y_1}{x_2 - x_1}$$ • $\dfrac{change\ in\ y}{change\ in\ x}$	$$y = mx + b$$ -Easiest way to graph: • Plot the y-intercept (b) • Write the slope (m) as a fraction. Use "change in y/change in x" to get more points on your line

Objective: Find the slope from a table, from a graph, and from two points

Hot Air Balloon Travel

1. Find and Interpret the Slope.

2. Count units on the graph

3. Find the change in y and change in x from a table

x	-2	-1	0	2
y	9	7	5	1

4. Use the slope formula: (-2, 9) and (1, 3)

Objective: Graph from slope intercept form and Write the equation for the graph

Graph each equation. Use each coordinate plane for two graphs.
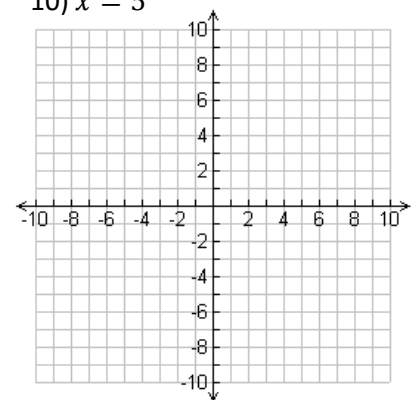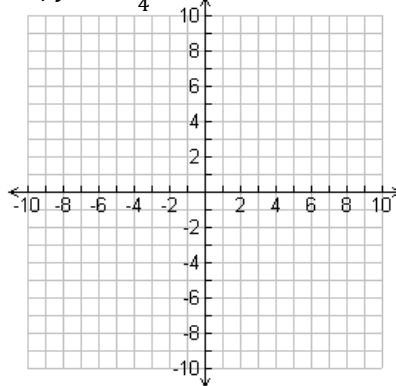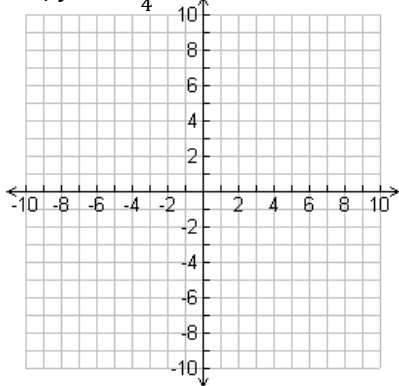
5) $y = \dfrac{1}{4}x$

7) $y = 2x + 6$
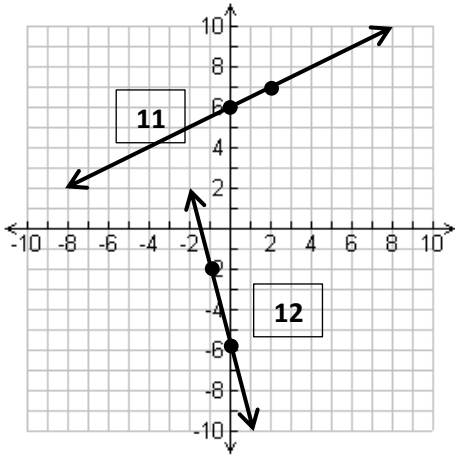
9) $y = -\dfrac{5}{2}x + 2$

6) $y = -\dfrac{1}{4}x - 2$
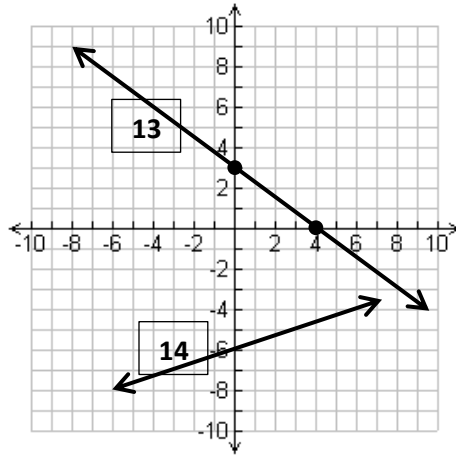
8) $y = -\dfrac{3}{4}x + 6$

10) $x = 5$

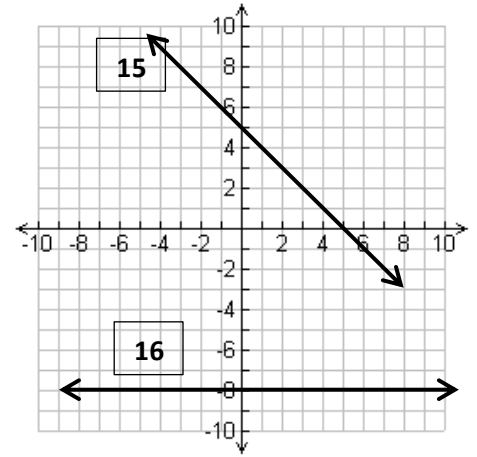**Write the equation of the line in slope-intercept form.**

11)

12)

13)

14)

15)

16)

Objective: Find the equation for the line from two points given

17) Write an equation of a line in slope-intercept form with a slope of ½ that passes through (2, -4)

18) Write an equation of a line in slope-intercept form that passes through the points (1, 5) and (2, 3)

19) Write an equation of a line in slope-intercept form that passes through the points (9, 1) and (7, 3)

20) Write an equation of a line in slope-intercept form that passes through the points (6, -3) and (-4, 2)

21) Write an equation of a line in slope-intercept form that passes through the points (9, 5) and (11, 5)

22) Write an equation of a line in slope-intercept form that passes through the points (5, 9) and (5, 11)