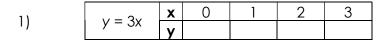
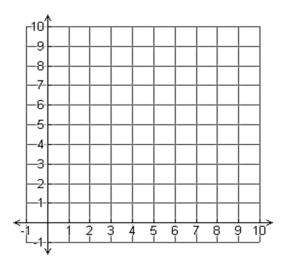
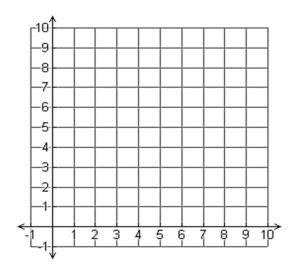
### You Try:

Use the direct variation equation to complete the table and then graph the ordered pairs.





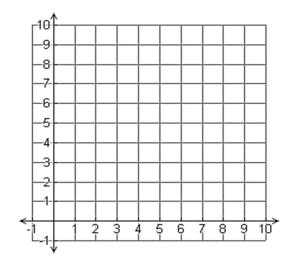
2)	$y = \frac{1}{2}x$	х		2	6	8	
		у	0				5



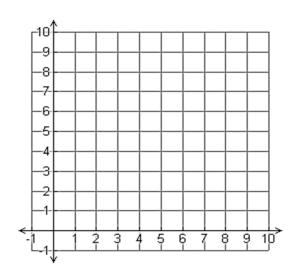
	y = 0.8x	Х	0	1	4		
		у				4.8	8

3)

4)



\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	X	0	2	3	4	
y = 2x	у					10



## Direct Variation in the REAL World

An iPod Nano can hold up to 16 gigabytes (GB) of data.

1)	How many gigabytes can be stored on 0 Nanos?	

How many on 1 Nano? \_\_\_\_\_

How many on 5 Nano?

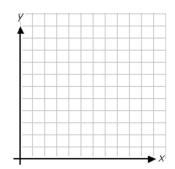
How many on 12 Nano? \_\_\_\_\_

2)	If you have enough iPo	d Nanos to	hold 80 GB,	how man	y iPoc
	Nanos do you have?				

3) Complete the chart:

x (# of iPods)	0	2			25
y (total GB)			64	160	

- 4) What is the direct variation equation (in terms of y=kx): \_\_\_\_
- 5) Based on this problem, answer the following:
  - a) In words, what does the input (x) represent?
  - b) In words, what does the output (y) represent?
  - c) In words, what does the constant (k) represent?
- 6) As the number of iPods increases, the total number of GB
- 7) Look at the values in the table above. Write each set of (x,y)values as an ordered pair
- 8) Graph the ordered pairs:



# Math 6 - Unit 4: One-Step Equations and **Inequalities Review #2**

### **Knowledge and Understanding**

- 1) When solving equations, why is it important to substitute your solution into the equation at the end.
- 2) What is the difference between an open circle and a closed circle in an inequality?

#### **Proficiency of Skills**

Solve each equation. Remember to show all work!

3) 
$$t - 1 = 11\frac{1}{2}$$
 4)  $\frac{n}{5} = 10$ 

4) 
$$\frac{n}{5} = 10$$

5) 
$$r + 7 = 49$$

Solve and graph the solution to each inequality. Show all work!

6) 
$$k \le 7$$

8) 
$$x \neq 3$$