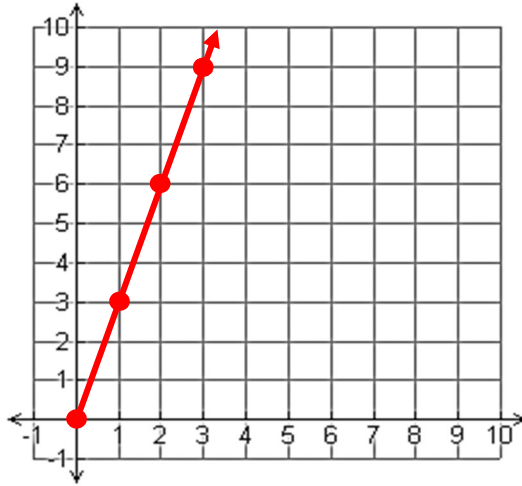


You Try:

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

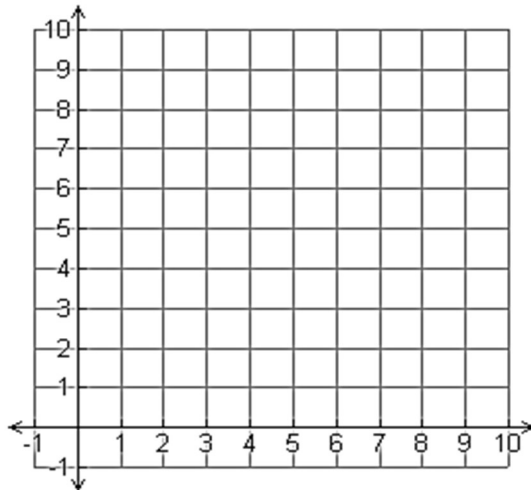
1)

$y = 3x$	x	0	1	2	3
	y	0	3	6	9



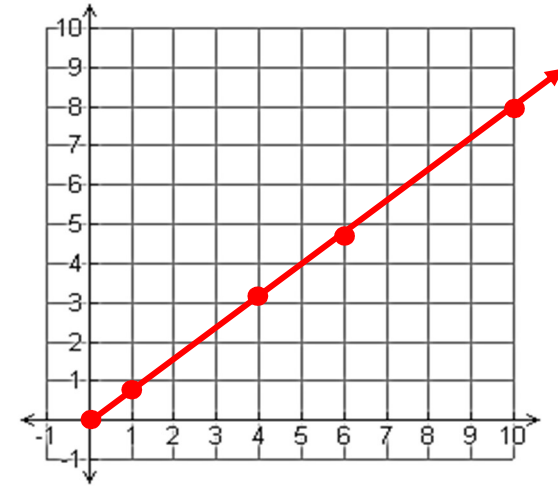
2)

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



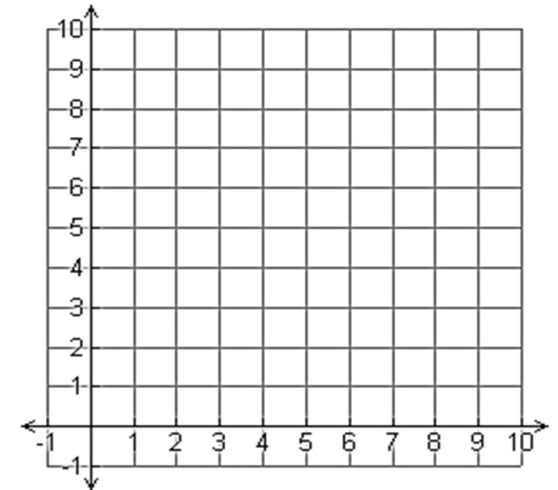
3)

$y = 0.8x$	x	0	1	4	6	10
	y	0	.8	3.2	4.8	8



4)

$y = 2x$	x	0	2	3	4	
	y					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? **0**
 How many on 1 Nano? **16**
 How many on 5 Nano? **80**
 How many on 12 Nano? **192**
- 2) If you have enough iPod Nanos to hold 80 GB, how many iPod Nanos do you have? **5**

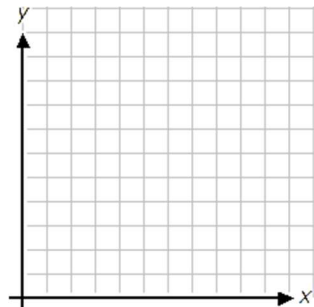
3) Complete the chart:

x (# of iPods)	0	2	4	10	25
y (total GB)	0	32	64	160	400

- 4) What is the direct variation equation (in terms of $y=kx$): **$y = 16x$**
- 5) Based on this problem, answer the following:
- In words, what does the input (x) represent? **# of iPod Nanos**
 - In words, what does the output (y) represent? **# of GB Total**
 - In words, what does the constant (k) represent? **# of GB per Nano**
- 6) As the number of iPods increases, the total number of GB **Increases**
- 7) Look at the values in the table above. Write each set of (x,y) values as an ordered pair

(0, 0) **(2, 32)** **(4, 64)** **(10, 160)** **(25, 400)**

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) $\frac{n}{5} = 10$ 5) $r + 7 = 49$

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

6) $k \leq 7$ 7) $a > 120$ 8) $x \neq 3$

