Name: _____ Date: _____ Hour: _____

Direct Variation - Guided Notes

- Direct variation is a special type of _____.

- In order for two quantities to show direct variation, _____ things <u>must</u> be true:

  - They must be _____.

  - The line formed must pass through _____.

- The equation for a relationship that is direct variation is _____.

- The number k is the _____, but is also sometimes referred to as the

  _____.

- The number k can <u>never</u> be _____.

- Two quantities that show direct variation are also always _____.

<u>Examples</u> - Graph the points below and determine whether they show direct variation. If so, write an equation.
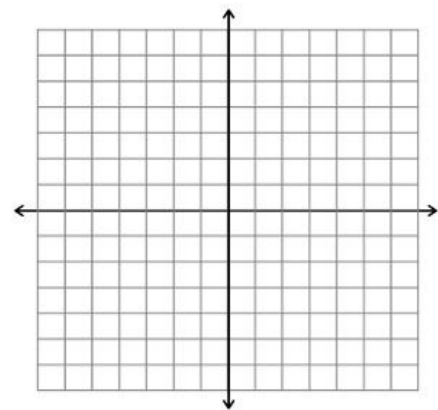
a.

x	1	2	3	4
y	−2	0	2	4
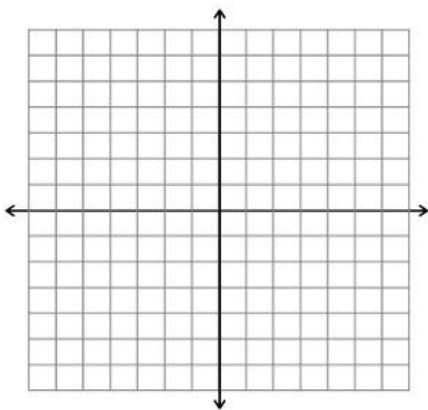
b.

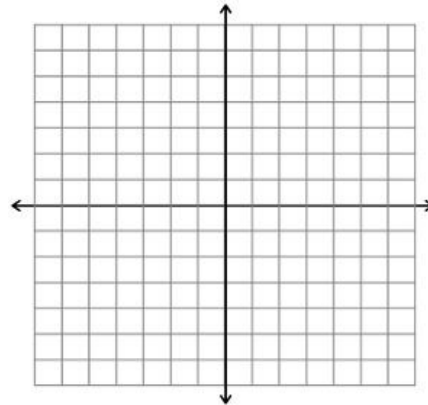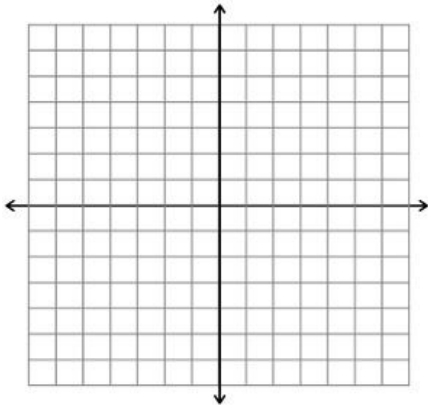| x	0	2	4	6
y	0	2	4	6

1. Explain what it means if x and y vary directly.

2. What point will be on every graph of a direct variation relationship?

3. Graph the ordered pairs in a coordinate plane. Do you think that graph shows that the quantities vary directly? Explain your reasoning.

a. (−1, −1), (0, 0), (1, 1), (2, 2)　　　**b.** (−4, −2), (−2, 0), (0, 2), (2, 4)

4. Tell whether x and y show direct variation. Explain your reasoning. If so, find k and write an equation.

a.

x	1	2	3	4
y	2	4	6	8

b.

x	−2	−1	0	1
y	0	2	4	6

c.

x	−1	0	1	2
y	−2	−1	0	1

d.

x	3	6	9	12
y	2	4	6	8