

Practice

Graphing: Graphs of Data

Answer these problems, then check your answers using the key on the next page. If you missed something, look at the solutions after the answer key, and if you still don't understand, watch the review video again.

#1) Find the coordinates to points A, B, F, D, G, and K:

Point A:

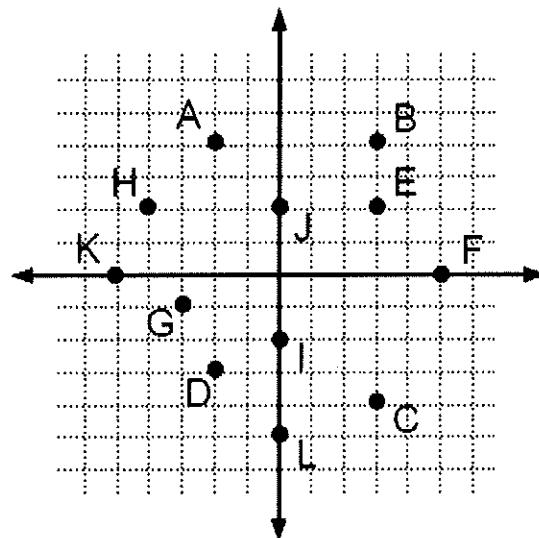
Point B:

Point F:

Point D:

Point G:

Point K:

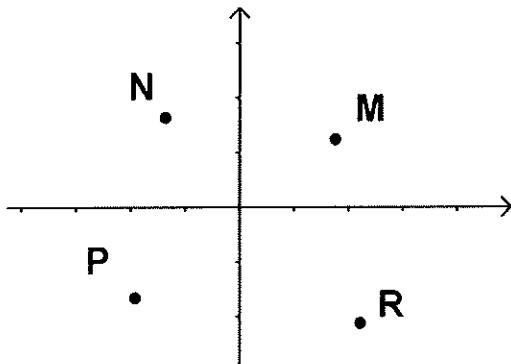


#2) Find the letter of the point at $(3, 2)$

#3) Find the letter of the point at $(-4, 2)$

#4) In the graph, which of the following conditions are true for point M?

- a) $x > 0, y < 0$
- b) $x > 0, y > 0$
- c) $x = 0, y = 0$
- d) $x < 0, y > 0$
- e) $x < 0, y < 0$

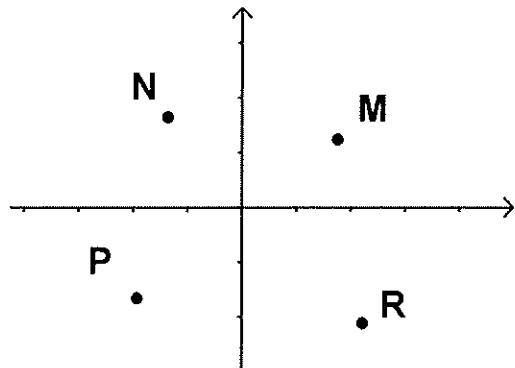


#5) In the graph, which of the following conditions are true for point N?

- a) $x > 0, y < 0$
- b) $x > 0, y > 0$
- c) $x = 0, y = 0$
- d) $x < 0, y > 0$
- e) $x < 0, y < 0$

#6) In the graph, which of the following conditions are true for point P?

- a) $x > 0$, $y < 0$
- b) $x > 0$, $y > 0$
- c) $x = 0$, $y = 0$
- d) $x < 0$, $y > 0$
- e) $x < 0$, $y < 0$



#7) In the graph, which of the following conditions are true for point R?

- a) $x > 0$, $y < 0$
- b) $x > 0$, $y > 0$
- c) $x = 0$, $y = 0$
- d) $x < 0$, $y > 0$
- e) $x < 0$, $y < 0$

#8) If $xy = 1$, which of the following conditions must also be true? (multiple answers may be correct)

- a) $x > 0$, $y < 0$
- b) $x > 0$, $y > 0$
- c) $x = 0$, $y = 0$
- d) $x < 0$, $y > 0$
- e) $x < 0$, $y < 0$

#9) If $\frac{x}{y} = 1$, which of the following conditions must also be true? (multiple answers may be correct)

- a) $x > 0$, $y < 0$
- b) $x > 0$, $y > 0$
- c) $x = 0$, $y = 0$
- d) $x < 0$, $y > 0$
- e) $x < 0$, $y < 0$

#10) If $xy = -1$, which of the following conditions must also be true? (multiple answers may be correct)

- a) $x > 0$, $y < 0$
- b) $x > 0$, $y > 0$
- c) $x = 0$, $y = 0$
- d) $x < 0$, $y > 0$
- e) $x < 0$, $y < 0$

Answers:

#1) $A:(-2, 4)$ $B:(3, 4)$ $F:(5, 0)$ $D:(-2, -3)$ $G:(-3, -1)$ $K:(-5, 0)$

#2) E

#3) H

#4) b

#5) d

#6) e

#7) a

#8) b and e

#9) b and e

#10) a and d

Solutions:

#1) Find the coordinates to points A, B, E, D, G, and K:

Point A: $(-2, 4)$ $\leftarrow (x \text{ is on left})$

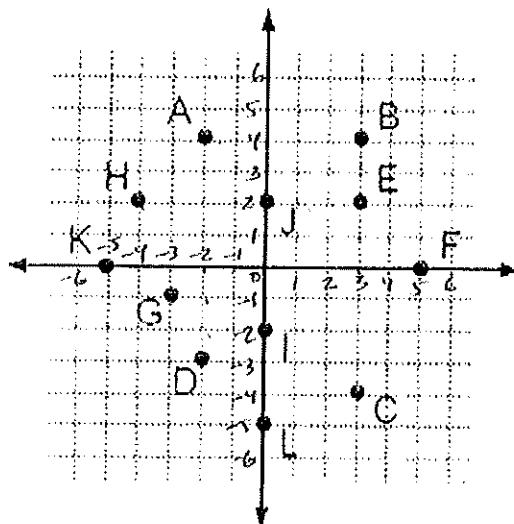
Point B: $(3, 4)$

Point E: $(5, 0)$

Point D: $(-2, -3)$

Point G: $(-3, -1)$

Point K: $(-5, 0)$

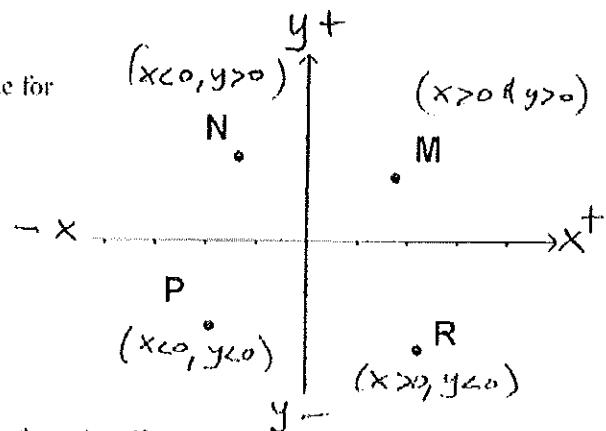


#2) Find the letter of the point at $(3, 2)$ E

#3) Find the letter of the point at $(-4, 2)$ H

#4) In the graph, which of the following conditions are true for point M?

- a) $x > 0, y < 0$
- b) $x > 0, y > 0$
- c) $x = 0, y = 0$
- d) $x < 0, y > 0$
- e) $x < 0, y < 0$

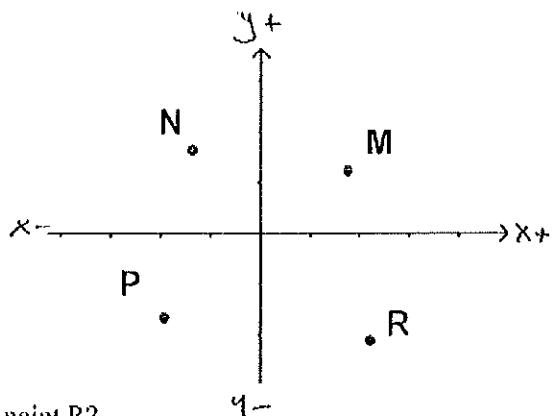


#5) In the graph, which of the following conditions are true for point N?

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- b) $x > 0, y > 0$
- c) $x = 0, y = 0$
- d) $x < 0, y > 0$
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- b) $x > 0, y > 0$
- c) $x = 0, y = 0$
- d) $x < 0, y > 0$
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- a) $x > 0, y < 0$
- b) $x > 0, y > 0$
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- d) $x < 0, y > 0$
- e) $x < 0, y < 0$

#8) If $xy = 1$, which of the following conditions must also be true? (multiple answers may be correct)

- a) $x > 0, y < 0$
- b) $x > 0, y > 0$
- c) $x = 0, y = 0$
- d) $x < 0, y > 0$
- e) $x < 0, y < 0$

*1 is positive
so $x \cdot y$ must either be both positive $(+)(+) = (+)$
or both negative $(-)(-) = (-)$
so either $x > 0$ and $y > 0$
or $x < 0$ and $y < 0$*

b or e is true

#9) If $\frac{x}{y} = 1$, which of the following conditions must also be true? (multiple answers may be correct)

- a) $x > 0, y < 0$
- b) $x > 0, y > 0$
- c) $x = 0, y = 0$
- d) $x < 0, y > 0$
- e) $x < 0, y < 0$

*same as #8, 1 is positive
divide is same as multiply so $x \cdot y$ are positive
or both are negative*

b or e is true

#10) If $xy = -1$, which of the following conditions must also be true? (multiple answers may be correct)

- a) $x > 0, y < 0$
- b) $x > 0, y > 0$
- c) $x = 0, y = 0$
- d) $x < 0, y > 0$
- e) $x < 0, y < 0$

*if $xy = -1$, -1 is negative
so for x and y one must be positive
and the other negative
so either $x > 0$ and $y < 0$
or $x < 0$ and $y > 0$*

a or d is true