Sect 3.1 & 3.2 Unit Test – Concepts of Lines

Name:_____ **Section:**_____

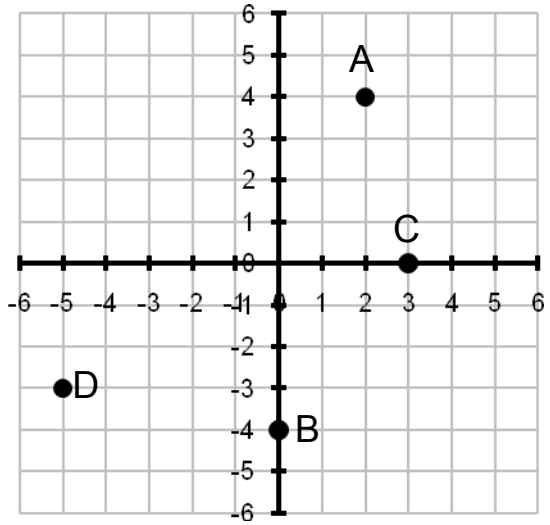
Plot the given points on the rectangular coordinate system:

1) a) (3, 5)
   b) (0, – 2)
   c) (4, 0)
   d) (– 2, 3)

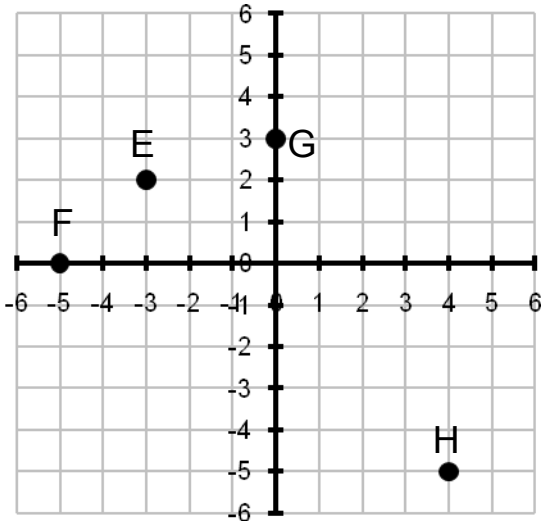
2) a) (0, 5)
   b) (3, – 4)
   c) (– 3, 0)
   d) (– 1, – 2)

Estimate the coordinates of the following points:

3)



4)



A)

B)

C)

D)

E)

F)

G)

H)

Determine if the given ordered pair is a solution to the equation:

5) $2x - 7y = 14$; $(14, 2)$

6) $y = -5x + 4$ $(-2, -6)$

State the quadrant or axis where the following points are located:

7) a) $(3, -7)$

b) $(3, 5)$

c) $(-3, -7)$

d) $(-1, -1)$

8) a) $(2, 0)$

b) $(-5, 6)$

c) $(0, -6)$

d) $(3, 4)$

Graph the following lines by making a table of at least three ordered pairs and plotting the points:

9) $x + y = 3$

10) $6x - 3y = 12$

11) $y = -\frac{2}{3}x + 4$

12) $y = 5$

Find the x- and y-intercepts of the following lines:

13) $-3y + 2x = 9$

14) $x = -2$

Solve the following:

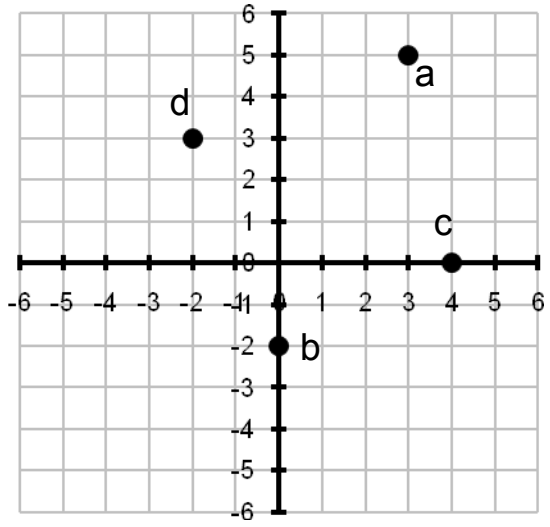
15) The amount of the Federal Deficit is approximated by the equation: $y = 115.26x - 327.22$ where y is the amount of debt in billions of dollars x years after 1999.

a) Find y when $x = 6$ and write it as an ordered pair.

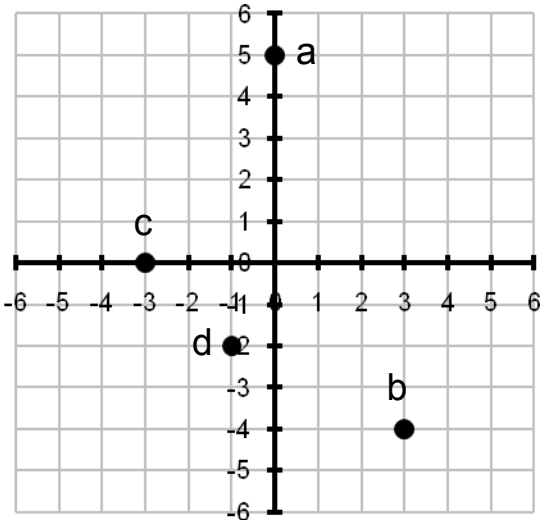
b) Interpret the meaning of the ordered pair found in part a.

Answers:

1)



2)



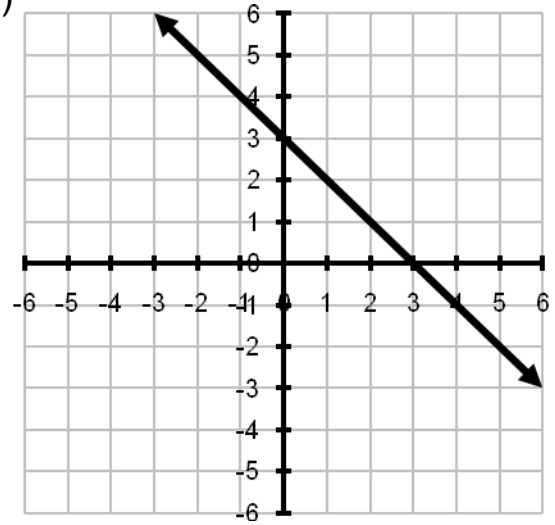
3) A: (2, 4) B: (0, – 4) C: (3, 0) D: (– 5, – 3)

4) E: (– 3, 2) F: (– 5, 0) G: (0, 3) H: (4, – 5)

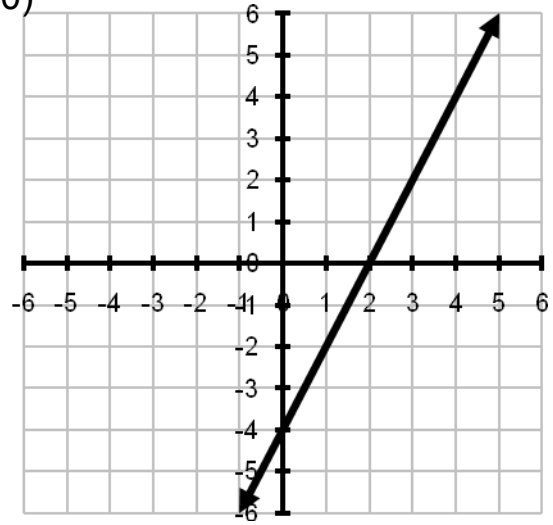
5) Yes 6) No 7a) IV 7b) I 7c) III 7d) III

8a) + x-axis 8b) II 8c) – y-axis 8d) I

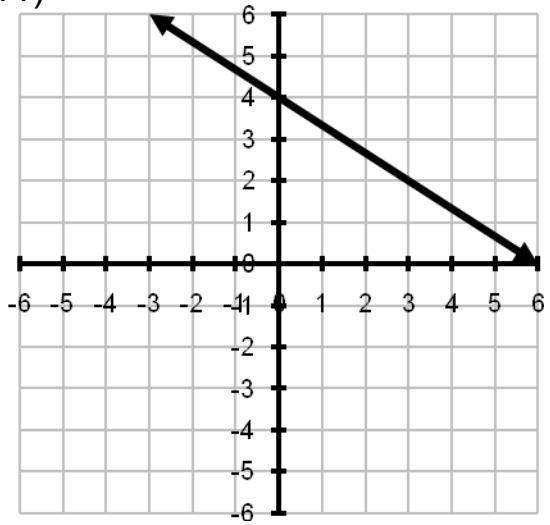
9)



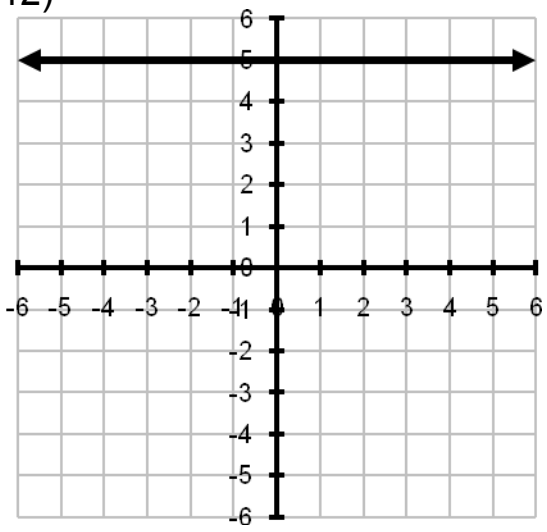
10)



11)



12)



13) x-int: (4.5, 0) y-int: (0, – 3) 14) x-int: (– 2, 0) y-int: none

15a) 364.46

15b) In 2005, the Federal Deficit was approximately $364.46 billion.