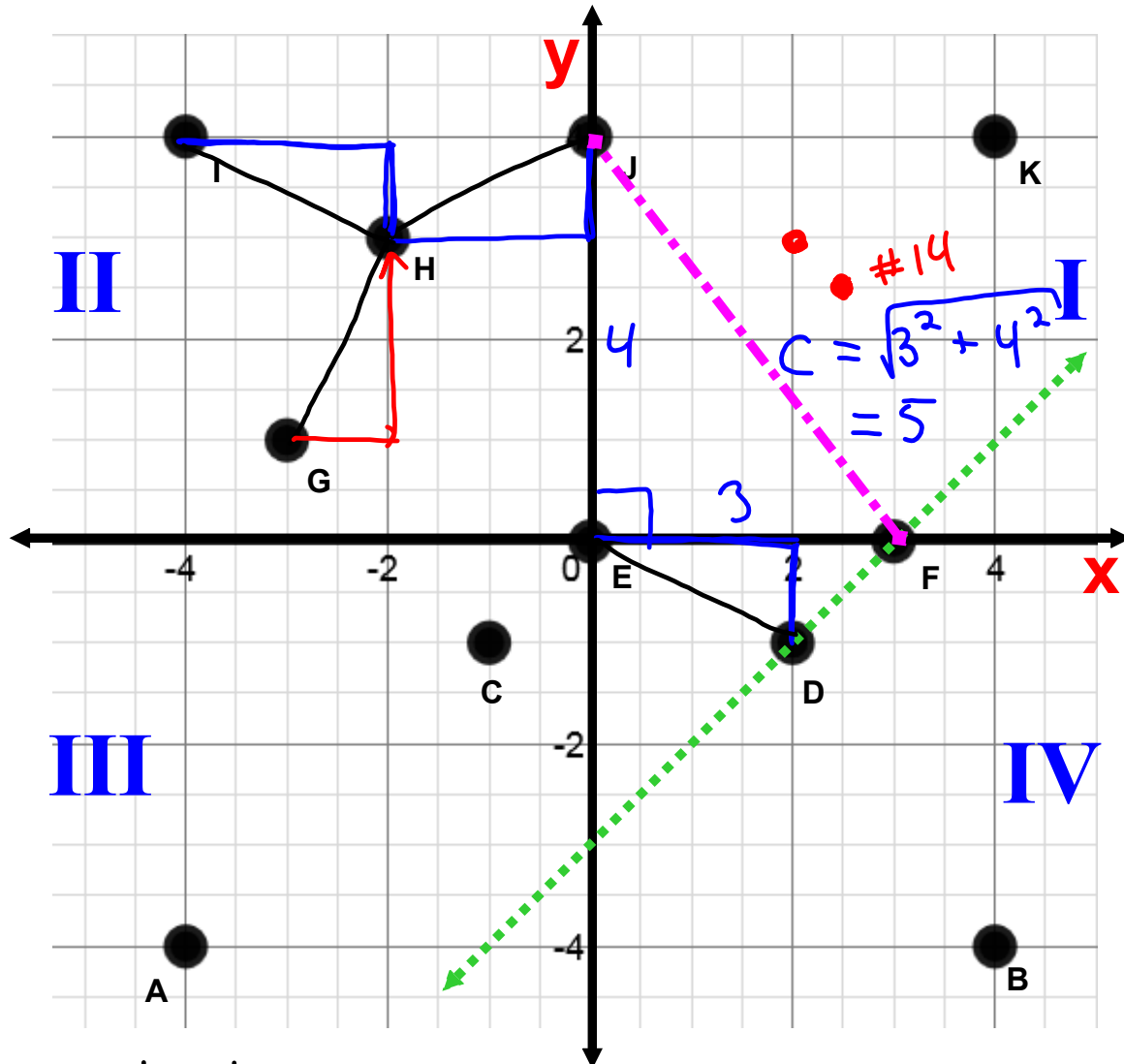# Review of Plotting Points and Graphs

- Used to visualize mathematical relationships.
- 2 axes divide grid into four quadrants: I, II, III, IV
- Coordinates are written as (x,y) and called an order pair or points.
- (0,0) is called the origin.

#14

$$C = \sqrt{3^2 + 4^2}$$
$$= 5$$

Letter	x	y
A	−4	−4
B	4	−4
C	−1	−1
D	2	−1
E	0	0
F	3	0
G	−3	+1
H	−2	3
I	−4	4
J	0	4
K	4	4

1. What quadrant contains point A? **III**

2. List all the points in quadrant II **G, H, I**

3. What points have an *y*-value of -1? **C, D**

4. What points have an *x*-value of 0? **E, J**

5. Place a dot at (2,3) and (-3,-2).

6. What points form the corners of a perfect square? **A, B, I, K**

7. Is point C on the same line from A to E? (**Yes**)/No   What other point is on the same line? **(-2,-2)**

8. Is point C on the same line from G to B? Yes/(**No**)

9. Going from G to H: **1** right and **2** up.

10. Going from H to J: **2** right and **1** up.

11. Going from E to D: **2** right and **1** down.

12. Going from I to C: **3** right and **5** down.

13. Place a dot 3 to the right and 1 up from point A.

14. Place a dot 2.5 to the right and 1.5 down from point J.

15. Write an ordered pair that is on the same line as D to F and in quadrant I **(4, 1)**, quadrant IV **(1,-2)**, and quadrant III **(-1, -4)**

16. What is the distance between A and B? **8**

17. What is the distance between E and J? **4**

18. The distance between C and E is the same as the distance between **C** and **D**.

19. The distance between G and H is the same as the distance between **H** and **J** ; D,E
    H   I

20. What is the distance between J and F? (hint: Look at the triangle that includes E).

$$c^2 = a^2 + b^2$$
$$c^2 = (3)^2 + (4)^2$$
$$c^2 = 9 + 16$$
$$c^2 = 25$$
$$c = \sqrt{25} = \boxed{5}$$