

4.1

Writing Equations to Describe Patterns

Practice

Page 159 #s 4-9, 11, 12, 14, 15

Math Challenge Approaching!!



Can you find the pattern??

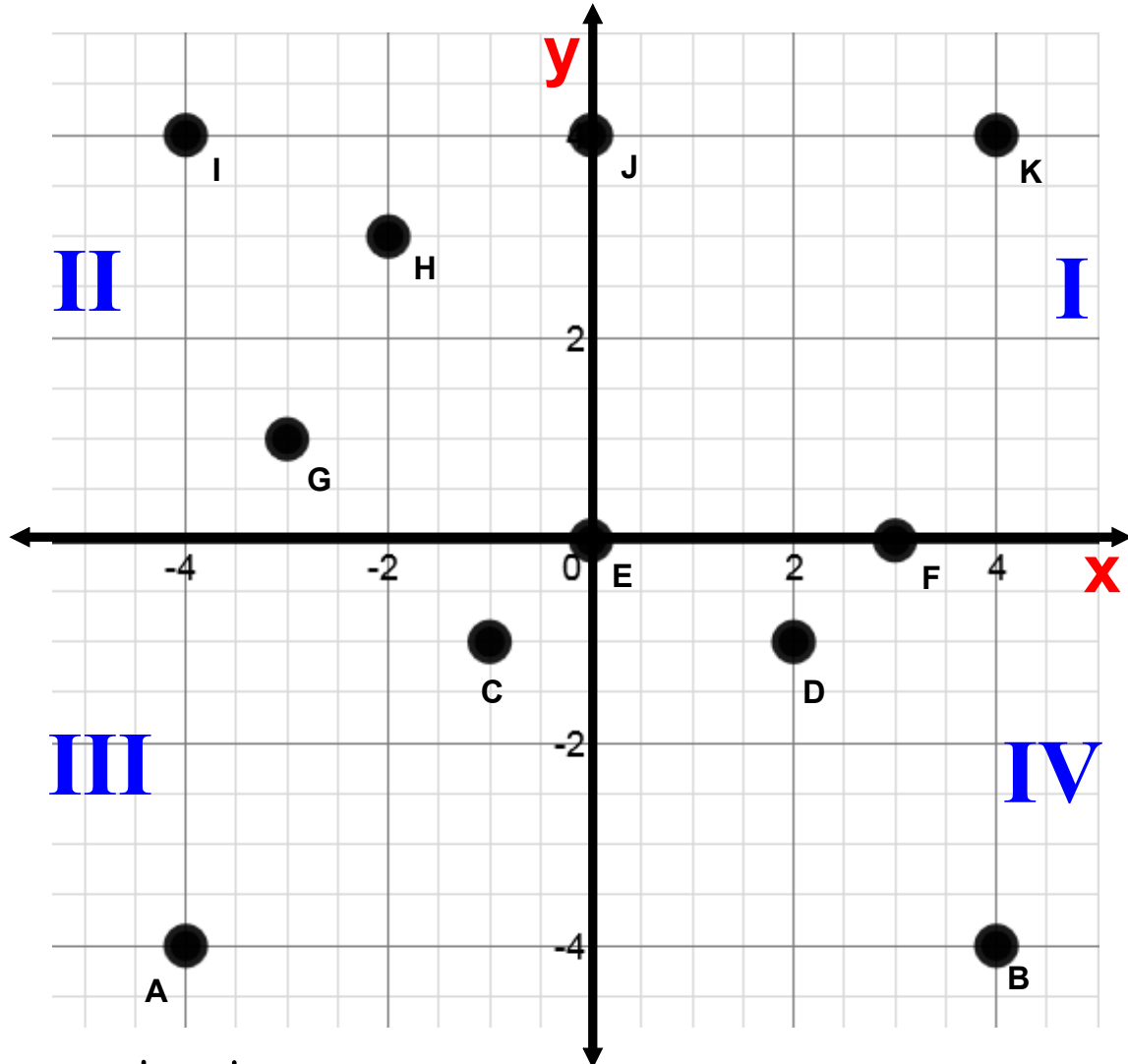
n	t
1	1
2	2
3	6
4	24
5	120
6	720

n!
↑
factorial

When you see it don't tell anyone!!

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.



Letter	x	y
A	-4	-4
B	4	-4
C		
D		
E		
F		
G		
H		
I		
J		
K		

1. What quadrant contains point A? _____
2. List all the points in quadrant II _____
3. What points have an y -value of -2 ? _____
4. What points have an x -value of 0 ? _____
5. Place a dot at $(2,3)$ and $(-3,-2)$.
6. What points form the corners of a perfect square? _____
7. Is point C on the same line from A to E? Yes/No What other point is on the same line? _____
8. Is point C on the same line from G to B? Yes/No
9. Going from G to H: _____ right and _____ up.
10. Going from H to J: _____ right and _____ up.
11. Going from E to D: _____ right and _____ down.
12. Going from I to C: _____ right and _____ 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 _____, quadrant IV _____, and quadrant III _____
16. What is the distance between A and B? _____
17. What is the distance between E and J? _____
18. The distance between C and E is the same as the distance between _____ and _____.
19. The distance between G and H is the same as the distance between _____ and _____.
20. What is the distance between J and F? (hint: Look at the triangle that includes E).