

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

1. Plot the points $(0,0)$, $(1,1)$, $(2,2)$, $(3,3)$. What is the next ordered pair in the pattern?
2. Plot the points $(1,0)$, $(2,0)$, $(3,0)$, $(4,0)$. What is the next ordered pair?
3. Plot the points $(0,2)$, $(1,2)$, $(2,2)$, $(3,2)$. What is the next ordered pair?
4. Plot the points $(0,0)$, $(1,2)$, $(2,4)$, $(3,6)$. What are the next two ordered pairs?
5. Plot the points $(1,1)$, $(2,3)$, $(3,5)$, $(4,7)$. What is the rule for y in terms of x ? Give the next ordered pair.
6. Plot the points $(0,5)$, $(1,4)$, $(2,3)$, $(3,2)$. What are the next two ordered pairs?
7. Plot the points $(2,2)$, $(3,4)$, $(4,6)$, $(5,8)$. What is the next ordered pair?
8. Which ordered pairs make a vertical line at $x = 3$ for $y = 0, 1, 2, 3$? List them.
9. Which ordered pairs make a horizontal line at $y = 4$ for $x = 0, 1, 2, 3$? List them.
10. Plot $(0,0)$, $(1,3)$, $(2,6)$, $(3,9)$. What is the next ordered pair?
11. Plot $(0,1)$, $(1,2)$, $(2,3)$, $(3,4)$. What is the 6th ordered pair in the pattern? (Count $(0,1)$ as 1st.)
12. Plot $(1,2)$, $(2,4)$, $(3,6)$, $(4,8)$. If x increases by 1, how does y change? Give the 7th ordered pair.
13. Plot $(0,0)$, $(1,0)$, $(2,1)$, $(3,1)$, $(4,2)$, $(5,2)$. What is the pattern of y -values? What is $(6,?)$ next ordered pair?
14. Plot $(0,0)$, $(1,1)$, $(2,4)$, $(3,9)$. What is the next ordered pair?
15. Which of these ordered pairs are on a straight line: $(0,0)$, $(1,2)$, $(2,4)$, $(3,7)$? List the ones that fit the linear pattern.
16. Given points $(1,2)$, $(2,4)$, $(3,6)$, is the relationship linear? If so, what is the slope?
17. Given points $(0,5)$, $(1,3)$, $(2,1)$, $(3,-1)$, is the relationship linear? What is the slope?
18. On a coordinate plane, points follow the rule $y = x + 2$. What is y when $x = 5$?
19. On a coordinate plane, points follow the rule $y = 2x - 1$. What is y when $x = 4$?
20. The points $(2,7)$, $(3,10)$, $(4,13)$ follow a rule. What is the rule and what is y when $x = 6$?
21. The points $(0,0)$, $(1,4)$, $(2,8)$, $(3,12)$ follow a rule. What is y when $x = 10$?
22. Points on a graph are $(1,3)$, $(2,6)$, $(3,9)$. What is the constant of proportionality between x and y ?
23. Points are $(2,1)$, $(4,2)$, $(6,3)$. Write the rule $y = ?x$
24. The plotted points go $(0,0)$, $(1,-1)$, $(2,-2)$, $(3,-3)$. What is the slope?
25. The plotted points are $(1,5)$, $(2,7)$, $(3,9)$. What is the equation in form $y = mx + b$?
26. On the coordinate plane, a pattern shows y decreases by 2 as x increases by 1. If $(0,8)$ is a point, what are the next two points?
27. Points $(0,2)$, $(2,4)$, $(4,6)$, $(6,8)$ are plotted. What is y when $x = 10$?
28. Points follow $y = 3x + 1$. List the ordered pairs for $x = 0,1,2,3$.
29. Points follow $y = -x + 4$. List y for $x = 0,1,2,3$.
30. Given plotted points $(1,4)$, $(2,7)$, $(3,10)$, what is the pattern for y ? Give y when $x = 0$.
31. Given ordered pairs $(1,2)$, $(2,4)$, $(3,6)$, what rule relates x to y ? Write $y = \dots$



Math Worksheet for 5th Grade

Number patterns

Name: _____

Due Date: _____

Teacher: _____

Parent Sign: _____

32. Given ordered pairs (1,3), (2,5), (3,7), (4,9), find y as a function of x .
33. Given ordered pairs (1,4), (2,8), (3,12), what is the multiplier from x to y ?
34. Given ordered pairs (2,5), (4,11), (6,17), what rule relates x to y ? (Assume linear.)
35. Given ordered pairs (0,6), (1,9), (2,12), determine $y = ?x + ?$
36. Given ordered pairs (1,1), (2,4), (3,9), (4,16), what is pattern for y in terms of x ?
37. Given ordered pairs (1,0), (2,1), (3,2), (4,3), what is y in terms of x ?
38. Ordered pairs: (1,5), (2,10), (3,15). What is the rule? What is y when $x = 0$?
39. Ordered pairs: (0,3), (1,6), (2,9), (3,12). What is the equation relating x and y ?
40. Ordered pairs: (1,2), (2,5), (3,10). Is the relationship linear? If not, describe the pattern for y .
41. Graph the sequence where $x = 1,2,3,4$ and y begins 2,4,6,8. Write the first 6 ordered pairs.
42. Graph the sequence where x increases by 1 and $y = 5x$. List $x = 0$ to 4 ordered pairs.
43. Create the first five ordered pairs for the sequence $y = 2x + 3$ with x starting at 0.
44. Create the first five ordered pairs for $y = -x + 5$ with $x = 0,1,2,3,4$.
45. Sequence: $x = 1,2,3,4,5$ and $y = x^2$. List the five ordered pairs.
46. Sequence: $x = 0,1,2,3,4$ and $y = 3x - 1$. List the ordered pairs.
47. Sequence where $x = 1,2,3,4$ and y doubles each time starting at $y = 1$. List the ordered pairs.
48. Sequence rule: $y = x + x$ (i.e., $y = 2x$). List ordered pairs for $x = 1$ to 6.
49. Sequence rule: $y = 4x - 2$. List ordered pairs for $x = 1,2,3$.
50. Sequence: Start at (0,0). Each step increase x by 1 and y by 3. List the first 6 ordered pairs.