

Linear Patterns

Grades 6-8 • Recognizing linear relationships and finding equations

Name: _____

Date: _____

1. What is the pattern in these points? $(-2, -8)$, $(-1, -5)$, $(0, -2)$, $(1, 1)$, $(2, 4)$

Answer: _____

2. If $y = 2x + 0$, what is y when $x = -4$?

Answer: _____

3. What is the pattern in these points? $(-2, 2)$, $(-1, 0)$, $(0, -2)$, $(1, -4)$, $(2, -6)$

Answer: _____

4. If $y = 2x + -2$, what is y when $x = 1$?

Answer: _____

5. What is the pattern in these points? $(-2, -3.0)$, $(-1, -2.5)$, $(0, -2.0)$, $(1, -1.5)$, $(2, -1.0)$

Answer: _____

6. What is the pattern in these points? $(-2, 2)$, $(-1, 1)$, $(0, 0)$, $(1, -1)$, $(2, -2)$

Answer: _____

7. What is the pattern in these points? $(-2, 0)$, $(-1, 1)$, $(0, 2)$, $(1, 3)$, $(2, 4)$

Answer: _____

8. What is the pattern in these points? $(-2, -1.0)$, $(-1, -1.5)$, $(0, -2.0)$, $(1, -2.5)$, $(2, -3.0)$

Answer: _____

9. If $y = 1x + 2$, what is y when $x = 5$?

Answer: _____

10. If $y = 1x + 2$, what is y when $x = -2$?

Answer: _____

Answer Key

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|-----|--|-----------------------------------|
| 1. | What is the pattern in these points? (-2, -8), (-1, -5), (0, -2), (1, 1), (2, 4) | $y = 3x - 2$ |
| 2. | If $y = 2x + 0$, what is y when $x = -4$? | -8 |
| 3. | What is the pattern in these points? (-2, 2), (-1, 0), (0, -2), (1, -4), (2, -6) | $y = -2x - 2$ |
| 4. | If $y = 2x + -2$, what is y when $x = 1$? | 0 |
| 5. | What is the pattern in these points? (-2, -3.0), (-1, -2.5), (0, -2.0), (1, -1.5), (2, -1.0) | $y = 0.5x - 2$ |
| 6. | What is the pattern in these points? (-2, 2), (-1, 1), (0, 0), (1, -1), (2, -2) | $y = -1x$ |
| 7. | What is the pattern in these points? (-2, 0), (-1, 1), (0, 2), (1, 3), (2, 4) | $y = x + 2$ |
| 8. | What is the pattern in these points? (-2, -1.0), (-1, -1.5), (0, -2.0), (1, -2.5), (2, -3.0) | $y = -0.5x - 2$ |
| 9. | If $y = 1x + 2$, what is y when $x = 5$? | 7 |
| 10. | If $y = 1x + 2$, what is y when $x = -2$? | 0 |