



Determine if the table shown represents a linear function (yes) or not (no).

Answers

1) $Y = -X^2$

| X | Y |
|----|----------|
| -4 | -16.000 |
| -5 | -25.000 |
| 10 | -100.000 |
| 4 | -16.000 |
| 8 | -64.000 |

2) $Y = 5 \times X - (X \times -1)$

| X | Y |
|-----|-----|
| -10 | -60 |
| -2 | -12 |
| -8 | -48 |
| 2 | 12 |
| 5 | 30 |

3) $Y = X^2 + 3$

| X | Y |
|----|--------|
| -3 | 12.000 |
| -8 | 67.000 |
| 1 | 4.000 |
| 2 | 7.000 |
| 6 | 39.000 |

4) $Y = 3 + X$

| X | Y |
|----|----|
| -6 | -3 |
| -8 | -5 |
| 1 | 4 |
| 2 | 5 |
| 8 | 11 |

5) $Y = \sqrt{X^2 - 5}$

| X | Y |
|----|-------|
| -4 | 3.317 |
| -7 | 6.633 |
| -8 | 7.681 |
| 6 | 5.568 |
| 7 | 6.633 |

6) $Y = 5 + \frac{X}{8}$

| X | Y |
|-----|-------|
| -10 | 3.750 |
| -1 | 4.875 |
| -3 | 4.625 |
| -5 | 4.375 |
| 9 | 6.125 |

7) $Y = 4^X + 8$

| X | Y |
|----|---------------|
| -3 | 8.015 |
| -6 | 8.000 |
| -8 | 8.000 |
| 10 | 1,048,584.000 |
| 6 | 4,104.000 |

8) $Y = -X \times 3$

| X | Y |
|-----|-----|
| -10 | 30 |
| -5 | 15 |
| 0 | 0 |
| 2 | -6 |
| 9 | -27 |

9) $Y = X - 4$

| X | Y |
|----|----|
| -2 | -6 |
| 0 | -4 |
| 10 | 6 |
| 7 | 3 |
| 8 | 4 |

10) $Y = \sqrt{X}$

| X | Y |
|---|-------|
| 0 | 0.000 |
| 1 | 1.000 |
| 3 | 1.732 |
| 4 | 2.000 |
| 9 | 3.000 |

11) $Y = X + 2$

| X | Y |
|----|----|
| -2 | 0 |
| 10 | 12 |
| 3 | 5 |
| 7 | 9 |
| 8 | 10 |

12) $Y = \sqrt{6 \times X}$

| X | Y |
|---|-------|
| 0 | 0.000 |
| 1 | 2.449 |
| 2 | 3.464 |
| 7 | 6.480 |
| 9 | 7.348 |

13) $Y = \frac{X}{2}$

| X | Y |
|----|--------|
| -1 | -0.500 |
| 0 | 0 |
| 4 | 2 |
| 5 | 2.500 |
| 7 | 3.500 |

14) $Y = X^2 + 8$

| X | Y |
|----|--------|
| -1 | 9.000 |
| -3 | 17.000 |
| -7 | 57.000 |
| 1 | 9.000 |
| 7 | 57.000 |

15) $Y = \sqrt{X - 8}$

| X | Y |
|----|-------|
| 10 | 1.414 |
| 8 | 0.000 |
| 9 | 1.000 |

16) $Y = \sqrt{X + 8}$

| X | Y |
|----|-------|
| -1 | 2.645 |
| 0 | 2.828 |
| 2 | 3.162 |
| 5 | 3.605 |
| 7 | 3.872 |

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2. _____
3. _____
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| 2 | 3.162 |
| 5 | 3.605 |
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Answers

1. no
2. yes
3. no
4. yes
5. no
6. yes
7. no
8. yes
9. yes
10. no
11. yes
12. no
13. yes
14. no
15. no
16. no