

Linear or not

Determine if the table is linear or not? If the table is linear, complete the missing row in the table.

Table A

| x | y |
|----|----|
| 2 | 14 |
| 5 | 35 |
| 7 | 49 |
| 10 | 70 |
| | |

Table B

| x | y |
|-----|-----|
| -10 | 50 |
| -2 | 10 |
| 4 | -20 |
| 14 | -70 |
| | |

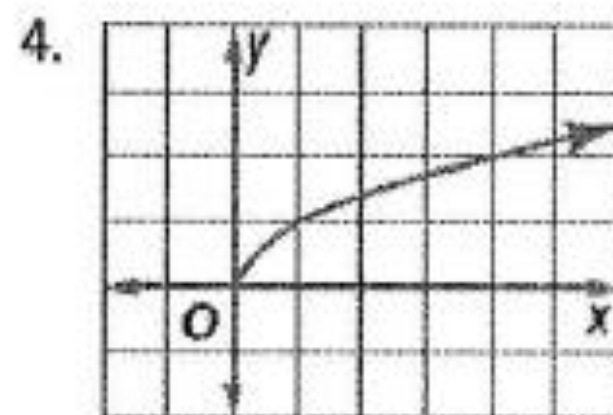
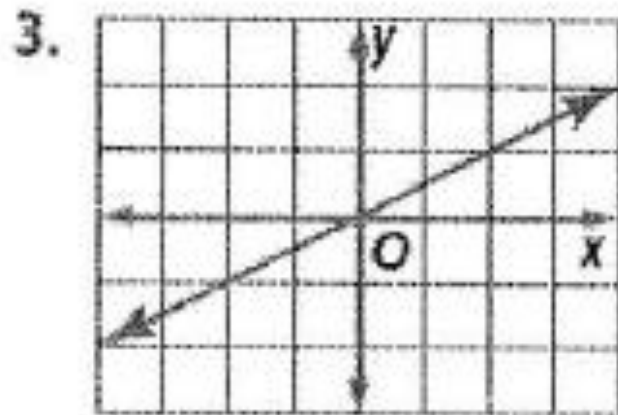
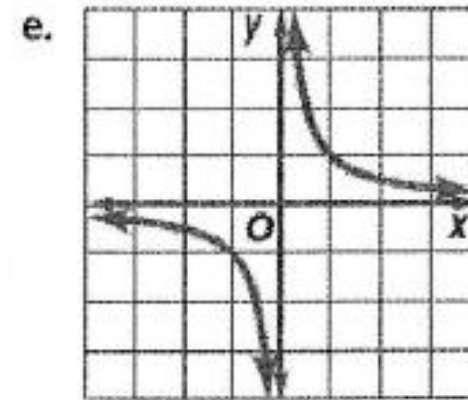
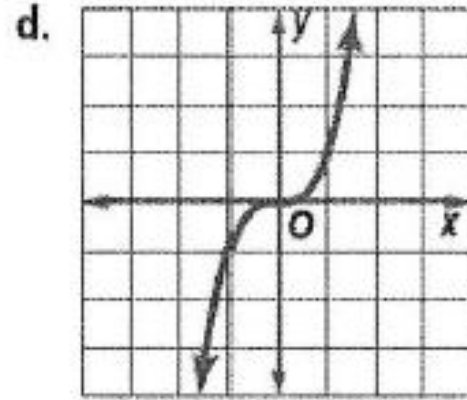
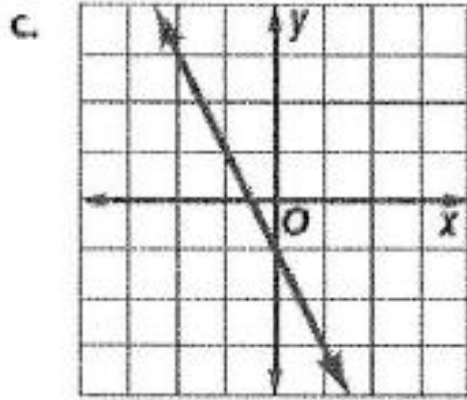
Table C

| x | y |
|----|-----|
| -1 | -24 |
| 2 | 48 |
| 4 | 90 |
| 8 | 192 |
| | |

Table D

| x | y |
|----|-----|
| -6 | 12 |
| -3 | 6 |
| 3 | -6 |
| 6 | -10 |
| | |

Determine if the graph represents a linear function



Determine if the equation represents a linear function

f. $y = 2x^3 + 1$

g. $y = 3x$

h. $y = \frac{x}{5}$

5. $y = \frac{x}{3}$

6. $y = 2x^2$

7. **MEASUREMENT** The table shows the measures of the sides of several rectangles. Are the widths of the rectangles a linear function of the lengths? Explain.

| | | | | |
|--------------|----|----|---|-----|
| Length (in.) | 1 | 4 | 8 | 10 |
| Width (in.) | 64 | 16 | 8 | 6.4 |

Determine if each table, graph or equation is **linear** or non-linear

a.

| | | | | |
|-----|----|----|----|----|
| x | 0 | 5 | 10 | 15 |
| y | 20 | 16 | 12 | 8 |

b.

| | | | | |
|-----|---|---|---|----|
| x | 0 | 2 | 4 | 6 |
| y | 0 | 2 | 8 | 18 |

1.

| | | | | |
|-----|---|---|---|----|
| x | 0 | 1 | 2 | 3 |
| y | 1 | 3 | 6 | 10 |

2.

| | | | | |
|-----|----|---|----|----|
| x | 0 | 3 | 6 | 9 |
| y | -3 | 9 | 21 | 33 |