STANDARD V: The student will be able to apply graphing techniques.

OBJECTIVE

1. Graph or identify graphs of linear equations.

ELIGIBLE CONTENT

- Equations may be expressed in terms of $f(x)$.
- The options may be four graphs.
- The options may be four equations.
- The common relations are:
  - $x = \text{constant}$
  - $y = \text{constant}$
  - $y = x$
  - $y = \sqrt{x}$
  - $y = x^2$
  - $y = |x|$

TIP:

Use a T-Table to "see" the graph of any function, even iones like lines that you already know what they look like.

How do you make a T-table of a function?

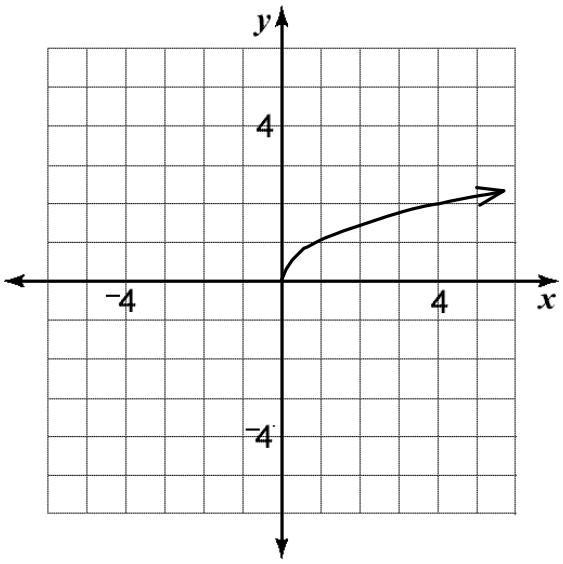
"Pick any X, find the Y it 'drives to."

X= {-2, -1, 0, 1, 2} are great X's to start with.

SAMPLE ITEMS

Sample items begin on next page.

1 Which of these equations represents the graph below?



A $y = x$

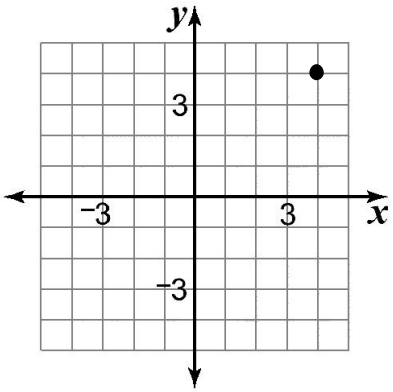
B $y = x^2$

C $y = \sqrt{x}$

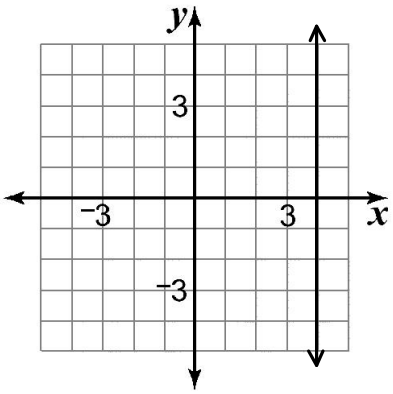
D $y = |x|$

2 Which of these graphs represents the equation $y = 4$?

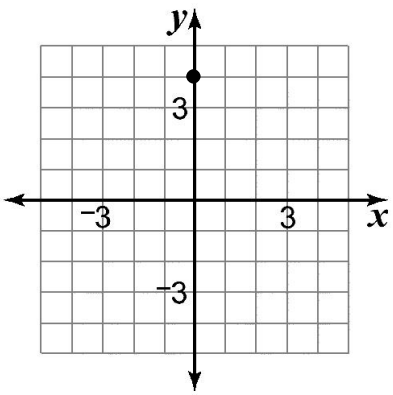
A



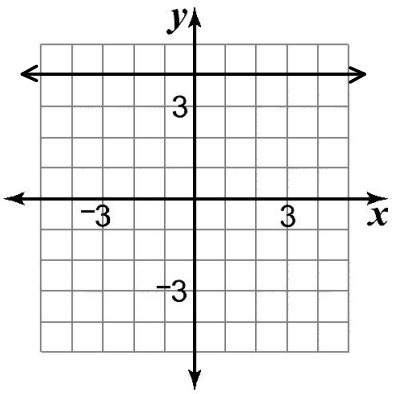
B



C

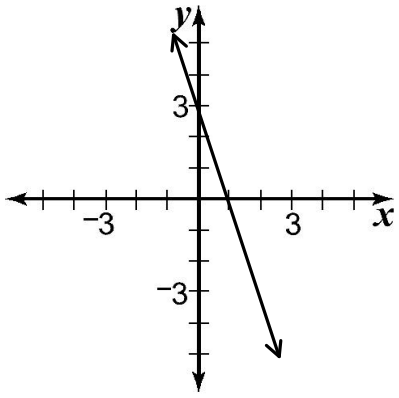


D

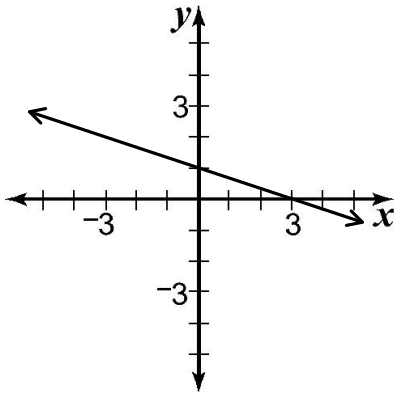


3 Which of these graphs represents the equation $f(x) = 3x + 3$?

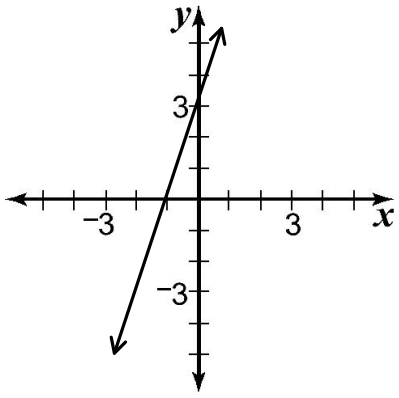
A



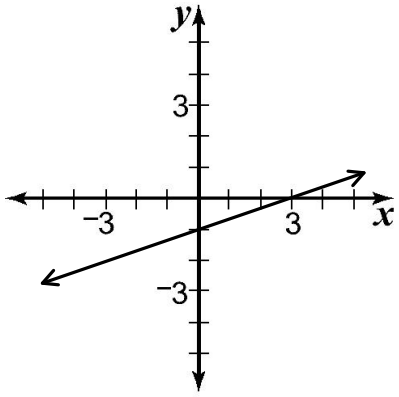
B



C

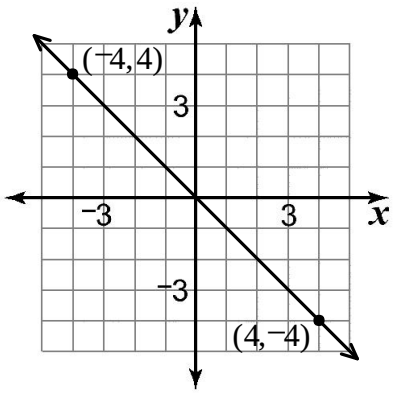


D

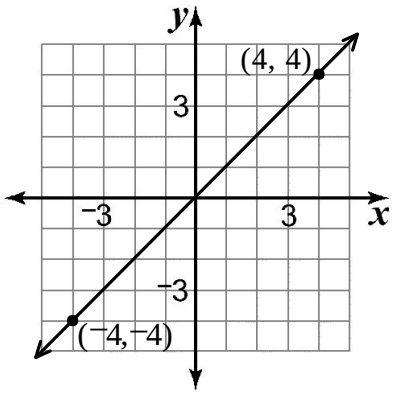


4 Which of these graphs represents the equation $2y = \frac{1}{2}x$?

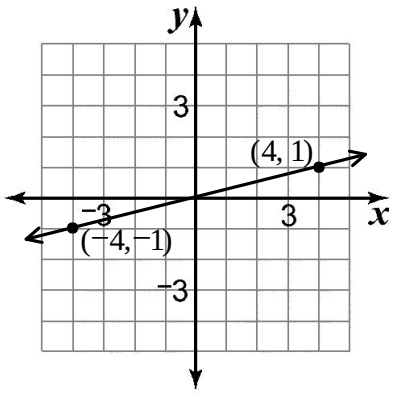
A



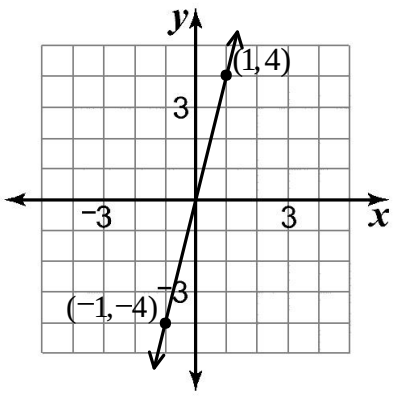
B



C

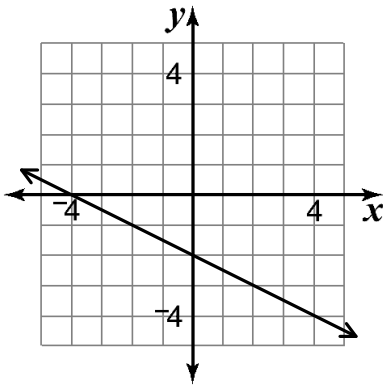


D

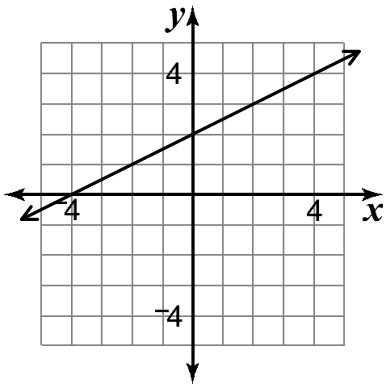


5 Which of these graphs represents the equation $y = -\frac{1}{2}x + 2$?

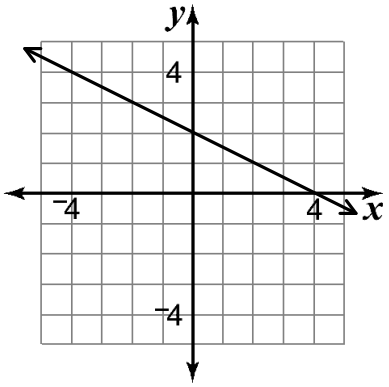
A



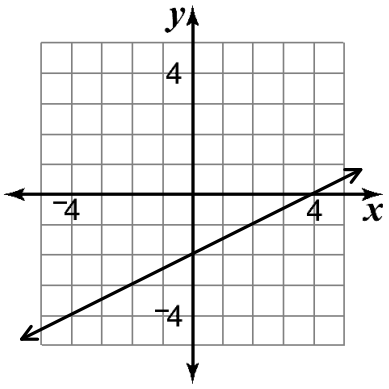
B



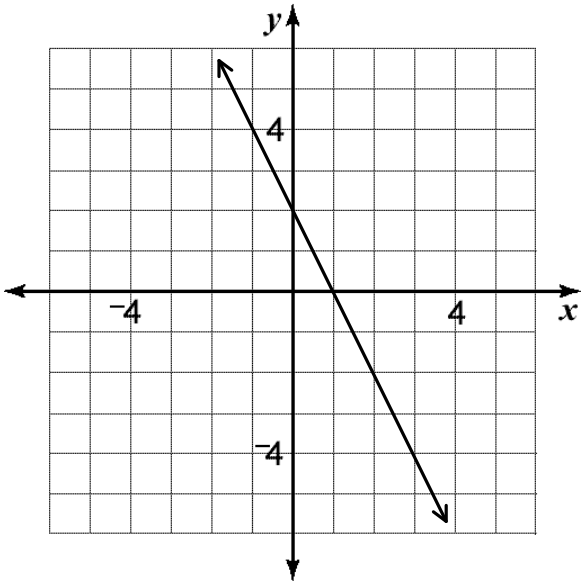
C



D



6 What is the equation of the line shown in the graph below?



A $y = 2x + 2$

B $y = -\frac{1}{2}x + 2$

C $y = -2x + 2$

D $y = \frac{1}{2}x + 2$