

Identify equations with infinitely many solutions

- 1** How would you check whether $x = 1$ is a solution to this linear equation?

$$3(3x + 3) = 4x + 14$$

- | | |
|---|---------------------------|
| A | $3(3(2) + 3) = 4(2) + 14$ |
| B | $33(1) + 3 = 4(1) + 14$ |
| C | $3(3(1) + 3) = 4x + 14$ |
| D | $3(3(1) + 3) = 4(1) + 14$ |

- 2** Is $x = 0$ a solution to this linear equation?

$$2(2x + 5) = 3x + 11$$

- | | |
|-----|----|
| A | B |
| Yes | No |

- 3** Zero solutions

A $4(4x + 6) = 16x + 24$

B $3(2x + 1) = 6x + 6$

- 4** How many solutions does this linear equation have?

$$3(3x + 3) = 9x + 8$$

- | | |
|---|---------------------------|
| A | Infinitely many solutions |
| B | Zero solutions |
| C | One solution |

- 5** One solution

A $4(2x + 3) = 2x + 4$

B $4(2x + 3) = 8x + 16$

- 6** How many solutions does this linear equation have?

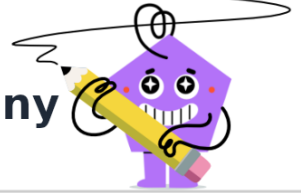
$$2(4x + 5) = 3x + 2$$

- | | |
|---|---------------------------|
| A | One solution |
| B | Zero solutions |
| C | Infinitely many solutions |

- 7** Infinitely many solutions

A $4(3x + 1) = 3x + 6$

B $4(3x + 1) = 12x + 4$

**Identify equations with infinitely many solutions****8**

How many solutions does this linear equation have?

$$3(3x + 4) = 9x + 12$$

A Infinitely many solutions

B Zero solutions

C One solution

9

One solution

A

$$4(3x + 5) = 6x + 3$$

B

$$4(3x + 3) = 12x + 12$$

10

How many solutions does this linear equation have?

$$3(4x + 2) = 7x$$

A One solution

B Zero solutions

C Infinitely many solutions

11

One solution

A

$$3(3x + 4) = 2x + 2$$

B

$$4(2x + 4) = 8x + 16$$

12

How many solutions does this linear equation have?

$$2(4x + 2) = 8x + 8$$

A Infinitely many solutions

B Zero solutions

C One solution