



## Verify solutions to equations by substitution

**1**

Solve for the missing value

$$65 - 12 - ? = 34$$

|         |         |         |
|---------|---------|---------|
| A<br>28 | B<br>22 | C<br>17 |
| D<br>19 | E<br>15 | F<br>11 |

**2**

Solve for the missing value

$$90 \div ? = 9$$

|         |            |         |
|---------|------------|---------|
| A<br>14 | B<br>1,000 | C<br>80 |
| D<br>0  | E<br>10    | F<br>12 |

**3**What does this equation become when  $c=8$ ,  $b=2$ ,  $m=4$ 

$$\frac{3c}{2b + 2m}$$

|                                                |                                                |
|------------------------------------------------|------------------------------------------------|
| A<br>$\frac{3 \cdot 8}{2 \cdot 2 - 2 \cdot 4}$ | B<br>$\frac{3 \cdot 8}{2 \cdot 2 + 2 \cdot 4}$ |
|------------------------------------------------|------------------------------------------------|

**4**What does this equation become when  $x=6$ ,  $y=2$ ,  $r=-3$ 

$$\frac{6x - 4r}{6y}$$

|                                                   |                  |
|---------------------------------------------------|------------------|
| A<br>$\frac{6 \cdot 6 - 4 \cdot (-3)}{6 \cdot 2}$ | B<br>$6^6 + 2^6$ |
|---------------------------------------------------|------------------|

**5**What is the value of this equation when  $b=4$ ,  $r=2$ ,  $p=-7$ 

$$\frac{4b - 2p}{3r}$$

|          |         |
|----------|---------|
| A<br>-5  | B<br>76 |
| C<br>-4  | D<br>5  |
| E<br>-5b | F<br>-2 |

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

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

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



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**7**Is  $x = -6$  a solution to this linear equation?

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

A

Yes

B

No

**8**Is  $x = 4$  a solution to this linear equation?

$$2(3x + 2) = 2x + 12$$

A

No

B

Yes

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

$$3(2x + 1) = 4x + 3$$

A

Yes

B

No

**10**Is  $x = -6$  a solution to this linear equation?

$$2(4x + 5) = 4x - 6$$

A

No

B

Yes

**11**Is  $x = 3$  a solution to this linear equation?

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

A

No

B

Yes

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

$$2(4x + 3) = 6x + 2$$

A

No

B

Yes