

Quiz: Linear Equations in One Variable

Section: Solution of an Equation and The Properties of Equality

Sub-section: Solution of an Equation and The Properties of Equality

Choose the correct answer.

1. Which of the following statements is the equation?

(Remember, MA 1.3 G.7/1)

- A. $4x > 28$
- B. $12a + 7b \neq 7a + 12b$
- C. $23 + 11m = 0$
- D. $1 \leq 100n + 2020$

Solution $23 + 11m = 0$

C is the equation, because C is the statement that has the property of equality of two expressions connected by equals sign “=”.

2. Find a solution of the equation $7 + 4x = 27$.

(Understand, MA 1.3 G.7/1)

- A. $x = 4$
- B. $x = 5$
- C. $x = 6$
- D. $x = 7$

Solution $x = 5$

$x = 5$ is the solution of this equation, because $x = 5$ makes the equation true.

3. Find a solution of the equation $9y = 108$.

(Understand, MA 1.3 G.7/1)

- A. $y = 9$
- B. $y = 10$
- C. $y = 11$
- D. $y = 12$

Solution $y = 12$

$y = 12$ is the solution of this equation, because $y = 12$ makes the equation true.

Quiz: Linear Equations in One Variable

Section: Solution of an Equation and The Properties of Equality

Sub-section: Solution of an Equation and The Properties of Equality

4. Find a solution of the equation $(3z \div 6) + 5 = 15$.

(Understand, MA 1.3 G.7/1)

A. $z = 18$

B. $z = 19$

C. $z = 20$

D. $z = 21$

Solution $z = 20$

$z = 20$ is the solution of this equation, because $z = 20$ makes the equation true.

5. Identify the property in “ $13x = 143$ is equivalent to $143 = 13x$ ”.

(Remember, MA 1.3 G.7/1)

A. symmetry

B. reflection

C. multiplication

D. division

Solution symmetry

“ $13x = 143$ is equivalent to $143 = 13x$ ” uses the property of symmetry.

6. Identify the property in “ $8 + 6y = 26$ is equivalent to $8 + 6y - 8 = 26 - 8$ ”.

(Remember, MA 1.3 G.7/1)

A. addition

B. subtraction

C. distribution

D. reflection

Solution subtraction

“ $8 + 6y = 26$ is equivalent to $8 + 6y - 8 = 26 - 8$ ” uses the property of subtraction.

Quiz: Linear Equations in One Variable

Section: Solution of an Equation and The Properties of Equality

Sub-section: Solution of an Equation and The Properties of Equality

7. Which of the following statements use the property of distribution?.

(Remember, MA 1.3 G.7/1)

A. $a - 45 = a - 45$

B. $4b - 9 = 23$ is equivalent to $4b - 9 + 9 = 23 + 9$

C. $12(c + 7) = 144$ is equivalent to $12(c) + 12(7) = 144$

D. $22d = 110$ is equivalent to $22d \div 22 = 110 \div 22$

Solution $12(c + 7) = 144$ is equivalent to $12(c) + 12(7) = 144$

“ $12(c + 7) = 144$ is equivalent to $12(c) + 12(7) = 144$ ” uses the property of distribution.

8. Which of the following statements is true?

(Understand, MA 1.3 G.7/1)

A. $33e - 12 = 54$ is equivalent to $33e - 12 + 12 = 54 + 11$

B. $6f = 36$ is equivalent to $6f \div 6 = 36 \times 6$

C. $9 + 15g = 114$ is equivalent to $9 + 15g - 9 = 114 - 9$

D. $\frac{3h}{7} = 51$ is equivalent to $\frac{3h}{7} \times \frac{7}{3} = 51 \times \frac{3}{7}$

Solution $9 + 15g = 114$ is equivalent to $9 + 15g - 9 = 114 - 9$

$33e - 12 = 54$ is equivalent to $33e - 12 + 12 = 54 + 12$,

$6f = 36$ is equivalent to $6f \div 6 = 36 \div 6$,

$\frac{3h}{7} = 51$ is equivalent to $\frac{3h}{7} \times \frac{7}{3} = 51 \times \frac{7}{3}$