

Unit 5 Objective 6 Remediation

Determine if the Solution is Correct

To determine if a number is a solution to an equation, substitute the number in for the variable and solve the expression on each side. If the two expressions are equal, the number is a solution to the equation. If the two expressions are not equal, the number is not a solution to the equation.



Example 1: Determine if 3 is a solution to the equation $22x = -66$

Solution: $22x = -66$

$$22 \cdot 3 = -66$$

$$66 \neq -66$$

No, it's not a solution.

Example 2: Determine if -2 is a solution to the equation $-1 = \frac{1}{2}x$

Solution: $-1 = \frac{1}{2}x$

$$-1 = \frac{1}{2} \cdot -2$$

$$-1 = -1$$

Yes, it's a solution.

Example 3: Determine if -12.2 is a solution to the equation $-6.1 = \frac{x}{2}$

Solution: $-6.1 = \frac{x}{2}$

$$-6.1 = \frac{-12.2}{2}$$

$$-6.1 = -6.1$$

Yes, it's a solution.

Try These

1. $-11m = 55 ; 5$

2. $-70 = -7y ; 10$

3. $-4.2a = -12.6 ; -3$

4. $-6d = -42 ; 8$

5. $8y = -40 ; -4$

6. $18x = -216 ; -11$

7. $11.4 = 5.7x ; 2$

8. $-4.9y = -9.8 ; 3$

9. $-7a = 49 ; -6$

10. $-85 = -5s ; 15$

11. $3y = 16 ; \frac{1}{3}$

12. $-4n = -22 ; \frac{11}{2}$

13. $-5x = 20 ; -4$

14. $4.5h = 101.25 ; -67.5$