

Variables on Both Sides – Meet the Skill

Name _____

Date _____

Solve the equations. Check by substituting your solution to the equation.

$$x + 33.24 = 9 - 2x$$

In these types of equation, both sides of the equation have a term with the variable. To isolate the variable, we need to get all the variable terms to one side and the constant terms to the other side. Next, we combine like terms and then isolate the variable by multiplying or dividing.

Take the variable part on left side of the equation and rest numerical part on the right side of the equation.

$$x + 2x = 9 - 33.24$$

Solve the equation

$$(1 + 2)x = 9 - 33.24$$

$$3x = -24.24$$

$$x = -\frac{24.24}{3}$$

$$x = -8.08$$

Check by substituting $x = -8.08$ to the equation.

$$-8.08 + 33.24 = 9 - 2(-8.08)$$

$$25.16 = 9 + 16.16$$

$$25.16 = 25.16$$

Answer: -8.08