



Equation Relay

► **Materials:**

- Equation cards
- Pencil
- Relay sheets

► **Directions:**

Students play in teams of five. If possible, teams should sit in rows. Each team needs one set of equation cards and up to six relay sheets. The first student of each team performs the first step in solving the equation, records his work in the first box, and then passes the relay sheet on to the second student. The second student of each team performs the second step in solving the equation, records her work in the second box, and then passes the relay sheet on to the third student. The process continues until the equation is solved. Each student should check the work of the previous student, and the last student should check the solution.

If the equation is solved correctly, the team earns a point. If the equation is not solved correctly, or if a team member completes more than one step during his or her turn, the team does not earn a point.

Play continues as the teams solve more equations, beginning the relay process where the previous round left off.

► **Who Wins?**

The team with the highest score wins.

► **Tips:**

- The game can be played with multiple types of equations to review for quarter or semester exams.
- It is not recommended to play this game with fewer than three students on a team.

Relay sheet for Equation Relay

Equation # ____	Equation # ____	Equation # ____
#1 Name: _____	#1 Name: _____	#1 Name: _____
#2 Name: _____	#2 Name: _____	#2 Name: _____
#3 Name: _____	#3 Name: _____	#3 Name: _____
#4 Name: _____	#4 Name: _____	#4 Name: _____
#5 Name: _____	#5 Name: _____	#5 Name: _____

Equation cards for Equation Relay

Equation 1

$$-5 - 5x + 3x = -1$$

Equation 2

$$13x - 6x + 5 = -37$$

Equation 3

$$3 = 3x - 7x + 23$$

Equation 4

$$8x - 5 = 13x + 10$$

Equation 5

$$-10 + 8x = 2x - 16$$

Equation 6

$$-9x + 7 = -5x - 21$$

Equation 7

$$6(-5x - 11) = 4x + 2$$

Equation 8

$$-4(3x + 2) = -8x + 12$$

Equation 9

$$3(5x - 10) = 18x - 5 + 2$$

Equation 10

$$11(3x + 2) = 12(2x + 6) + 4$$

Equation 11

$$8(-2x + 5) = 2(-3x + 10)$$

Equation 12

$$4(4x + 8) = 6(2x - 2)$$

Equation 13

$$|x + 10| = 6x$$

Equation 14

$$|2x - 11| = 9x$$

Equation 15

$$|-5x - 2| = |x + 10|$$

Equation 16

$$|x + 1| = |13x - 23|$$

Equation 17

$$|11x + 8| = |-4x + 6|$$

Equation 18

$$|2x - 7| = |-7x - 8|$$

Answers for Equation Relay

1. $x = -2$
2. $x = -6$
3. $x = 5$
4. $x = -3$
5. $x = -1$
6. $x = 7$
7. $x = -2$
8. $x = -5$
9. $x = -9$
10. $x = 6$
11. $x = 2$
12. $x = -11$
13. $x = 2$
14. $x = 1$
15. $x = -2$ and $x = 2$
16. $x = 2$ and $x = \frac{11}{7}$
17. $x = -\frac{2}{15}$ and $x = -2$
18. $x = -\frac{1}{9}$ and $x = -3$