Really Good Tug-of-War— Simple Algebraic Equations

This Really Good Stuff® product includes:
- 64 *Really Good Tug-of-War— Simple Algebraic Equations Playing Cards*, including 4 *Wild Cards*
- *Storage Box*
- This Really Good Stuff® Activity Guide, with answer key

All activity guides can be found online:

Congratulations on your purchase of this Really Good Stuff® **Really Good Tug-of-War—Simple Algebraic Equations**—an enjoyable and familiar way to strengthen students' algebraic thinking.

Before introducing **Really Good Tug-of-War—Simple Algebraic Equations,** make copies of this Really Good Stuff® Activity Guide and file the pages for future use. Or, download another copy of it from our Web site at www.reallygoodstuff.com. In order for the game to be played independently, make at least one extra copy of the back of this Activity Guide, which has an answer key printed on it, and store the answer key with the *Cards* so that the players can access it easily.

Playing *Really Good Tug-of-War—Simple Algebraic Equations*
Number of Players: 2 to 5
Object: To be the player who wins all of the *Cards* in the deck.
How To Play:
1. Decide who will be the first dealer. For instance, perhaps the first dealer is the person whose birthday is closest to January 1st. (If you play more than one game, the deal then moves counterclockwise among the players.) The dealer shuffles all the *Cards* and deals them out evenly among the players. If there are any extra *Cards*, set them aside.
2. Each player places his or her *Cards* in a pile facedown in front.
3. Each player turns his or her top *Card* faceup. The player to the right of the dealer reads the problem on his or her *Card*, solves for x, and states the answer. If the player gives a wrong answer, the first player to call out the correct answer wins that *Card* and places it at the bottom of his or her pile of *Cards*. Play continues around the circle with each player reading the problem on his or her *Card* aloud and stating the answer.
4. The player with the highest number for an answer wins all of the *Cards* from that round. If during the round two or more players turn over *Cards* with problems that have the same answer, those players play a *Tug-of-War* round. (**Note:** The wild *Cards* are considered a match with any *Card* that is displayed. When a wild *Card* appears, players automatically hold a *Tug-of-War*.):
   - Each *Tug-of-War* player places three more *Cards* facedown on top of his or her first *Card*, then he or she places another *Card* faceup on the other *Cards* in play.
   - The *Tug-of-War* players each read the problem on their top *Card* and state the answer. The player with the highest number for an answer wins all of the *Cards* played in the *Tug-of-War* round—unless one of the *Tug-of-War* players gives a wrong answer. In this case, the first *Tug-of-War* player to call out the correct answer wins all the *Cards*.
   - If any players during the *Tug-of-War* round have *Cards* with the same answer again, they play another *Tug-of-War* round until one *Tug-of-War* player finally wins and takes all of the *Cards* played.
5. Play continues until one player has won all of the *Cards* in the deck. (**Note:** As each player runs out of *Cards*, he or she shuffles the *Cards* he or she won and continues to play with them.)

Variations:
- Play *Tug-of-War* as outlined, but have the player with the lowest answer win the round.
- Have students solve the equations and compare the answer's absolute value with their partners' answer.
- Players flip over their *Cards* at the same time. The first player to answer one of the problems on any *Card* wins them all. If another players sees there is a *Card* of equal value, then there is a *Tug-of-War* played as outlined above.
- For students who are just learning algebra, use only the *Cards* with the easier problems and play with two players. Sort the *Cards* into types of equations and remove the sets of types that the students are still mastering. As the students' skills improve, add more *Cards*. (**Note:** When playing with fewer *Cards* and there is a *Tug-of-War*, each player only turns one *Card* facedown and then the second *Card* is placed faceup.)

Introducing *Really Good Tug-of-War—Simple Algebraic Equations*
Decide which "books" you want to use to demonstrate *Tug-of-War* and choose a couple of students to play with you for the class. While you shuffle the *Cards*, explain the object of the game and how to play to the volunteers. With the rest of the class gathered around, model playing the game.

1.	**x = -25**	$x - 41 = -66$	$\frac{x}{-5} = -5$	$3x = -75$	$3 + x = -22$
2.	**x = -21**	$x + 8 = -13$	$-3x = 63$	$x + 7 = -14$	$\frac{x}{3} = -7$
3.	**x = -10**	$16x = -160$	$x - 11 = -21$	$\frac{x}{2} + 8 = 3$	$\frac{x}{10} = -1$
4.	**x = -9**	$\frac{x}{3} = -3$	$x - 6 = -15$	$-9x = 81$	$x + 13 = 4$
5.	**x = -4**	$x + 32 = 28$	$7x = -28$	$x + 8 = 4$	$12x = -48$
6.	**x = 0**	$x + 17 = 17$	$\frac{x}{-2} = 0$	$x - 54 = -54$	$3x = 0$
7.	**x = 3**	$9x = 27$	$x + 25 = 28$	$11x - 6 = 27$	$2x = 6$
8.	**x = 6**	$4x = 24$	$x - 5 = 1$	$x + 4 = 10$	$\frac{x}{3} = 2$
9.	**x = 8**	$\frac{x}{2} = 4$	$x - 6 = 2$	$x + 35 = 43$	$3x = 24$
10.	**x = 9**	$x - 27 = -18$	$3x - 5 = 22$	$5x = 45$	$x + 18 = 27$
11.	**x = 11**	$x - 31 = -20$	$\frac{121}{x} = 11$	$8x = 88$	$9x - 90 = 9$
12.	**x = 25**	$\frac{x}{5} = 5$	$x - 16 = 9$	$-17 + x = 8$	$-2x + 60 = 10$
13.	**x = 49**	$\frac{x}{7} = 7$	$x - 9 = 40$	$2x = 98$	$x + 9 = 58$
14.	**x = 50**	$3x = 150$	$x + 60 = 110$	$\frac{x}{5} = 10$	$x - 45 = 5$
15.	**x = 100**	$x - 20 = 80$	$2x = 200$	$\frac{x}{5} = 20$	$x - 55 = 45$