

MDI

Perform the indicated operation.

1. $\frac{2}{3} + \frac{5}{7}$

2. $\frac{3}{4} - \frac{3}{8}$

Homework Questions?

Pickers Quiz!

Write your name on the sign up sheet next to the number of the card you have.

Launch

Operation _____ Inverse Operation

Addition

Subtraction

Multiplication

Division

What does inverse mean ?

Solving Equations Review (Day 1)

Learning Intentions: I understand the steps used to solve one-variable equations using inverse operations.

Success Criteria: I can solve one-variable equations with 80% accuracy on an exit ticket.

How do we solve equations with 1 variable?

Goal: Isolate the variable (get it by itself)

1. Start on the side that has the variable.

2. Add or subtract. (Use the inverse operation of the one that is in the problem)

3. Multiply or divide. (use the inverse operation of the one that is being performed.)

Single Step Equation Examples:

1. $x - 7 = -45$

2. $32 = x + 23$

3. $\frac{x}{-6} = 26$

4. $12x = -60$

TWO-Step Equations

Examples: Solve the following equations on your own. When you have finished, compare your answer to your table partner.

1. $6x - 1 = -13$

2. $-\frac{x}{3} - 13 = -25$

3. $6 = \frac{x}{7} - 8$

Assignment: Solve the following problems. Show all steps.

Due at the end of class.

1. $7 + x = 21$

7. $3x + 4 = 19$

2. $x - 3 = 12$

8. $6 - 4x = 38$

3. $4b = 32$

9. $-2x - 6 = 12$

4. $\frac{x}{14} = 4$

10. $7 + 2x = 9$

5. $-12x = -144$

11. $-6 + \frac{x}{4} = -10$

6. $\frac{x}{-8} = 3$

12. $8 + \frac{x}{-4} = 5$

MDI

Perform the indicated operation.

1. $\frac{11}{14} - \frac{2}{7}$

2. $\frac{3}{5} - \frac{7}{8}$

Solving Equations Review (Day 2)

Learning Intentions: I understand the steps used to solve one-variable equations using inverse operations.

Success Criteria: I can solve one-variable equations with 80% accuracy on an exit ticket.

Reminders:

1. Do order of operations in reverse

2. Keep the signs the same when multiplying and dividing (-6x = 36 means you divide by -6; and 6x = 36 means you divide by +6)

To Solve Equations with variables on both sides:

1. Simplify both sides so each has only a variable term and a constant.
2. Move all variable terms to one side. (Move the smaller of the 2 terms.)
3. Move all constant terms to the opposite side.
4. Solve the equation to get the variable by itself.

Examples: Determine which side you want the variable on. Then determine which side you want the constant on. Which variable should you move first?

$$7x + 5 = 4x - 22$$

$$7x + 5 = 4x - 22$$

$$2. 6x + 10 = 9x + 7$$

$$3. 6x + 22 = 3x + 31$$

$$4. 4x + 12 = 6x + 8$$

$$5. -3x + 5 = -7x + 21$$

$$6. -2x + 18 = -5x - 15$$

$$7. 17 - 2x = 14 + 4x$$

$$8. -11x - 12 = 3x + 30$$

9. $7 + 2n + 2 = 5n + 9 - 3n$

10. $8n + 77 = 5(5 - n)$

11. $5n + 4 = 7(n + 1) - 2n$

12. $3 - n = 7n + 27$

[Homework: Solving Equations Review #1 & #2](#)

ONLY complete the odds on each! (Due Wednesday!)