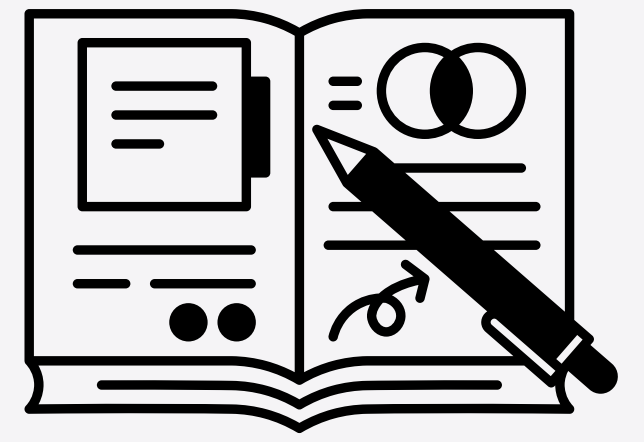# MY MESSY IDEA

Give space AND permission for students' rough draft ideas*

TRY IT

Before students solve a problem, ask them to jot down their initial thoughts or ideas about the problem in the messy ideas space.

WHY TRY IT?

Taking time to write down messy ideas

- helps students develop their problem solving skills
- encourages the use of multiple strategies
- helps students find a place to start

Solving Linear Equations

Solve for x

1. $2x + 3 = 7x - 13$
   $-2x \quad\quad -2x$
   $3 = 5x - 13$
   $+13 \quad\quad +13$
   $\frac{16}{5} = \frac{5x}{5}$ $\quad x = \frac{16}{5}$

2. $4(x + 5) - 3 = 2x + 7$
   $4x + 20 - 3 = 2x + 7$
   $-2x \quad\quad\quad -2x$
   $2x + 17 = 7$
   $-17 \quad -17$
   $\frac{2x}{2} = \frac{-10}{2}$ $\quad x = -5$

3. $12 = 3x - 6$
   $+6 \quad\quad +6$
   $\frac{18}{3} = \frac{3x}{3}$
   $6 = x$

4. $\frac{x-3}{4} = (2x + 12)4$
   $x - 3 = 8x + 48$
   $-x - 48 \quad -x - 48$
   $\frac{-51}{7} = \frac{7x}{7}$ $\quad -51/7 = x$

MY MESSY IDEAS

$30 \times 2\text{hrs} = \$60$
$\$40$ for shoes

(stick figures) $\}$ $\$20$
(stick figures) $\}$ $\$20$

5. Jaheem wants to take his friends bowling for his birthday. Bowling costs $30 an hour and $4 a person for shoes. If Jaheem has $100 to spend and wants to go bowling for two hours, how many friends can he invite?

$x = \#$ of friends
$100 = 30(2) + 4x$
$100 = 60 + 4x$
$-60 \quad -60$
$\frac{40}{4} = \frac{4x}{4}$
$10 = x$

Ten friends can come to the party.

MY MESSY IDEAS

($20 bill drawings) birthday
8 mowing

6. Misty saves all of her money in her piggy bank from the past year. She cracks open her piggy bank at the end of the year and counts $235. She earns $20 every time she mows a lawn and $75 for her birthday. How many lawns did Misty mow last year?

$M = \#$ of lawns mowed
$235 = 75 + 20m$
$-75 \quad -75$
$\frac{160}{20} = \frac{20m}{20}$
$8 = m$

Misty mowed 8 lawns.

CLICK FOR TEMPLATE

TEACHER NOTES

Students' initial thoughts could be a sketch, a note, a representation, or a question.

My Messy Ideas can be used on any problem type and makes a great addition to problem sets.

Make it clear to students that you will not evaluate their messy ideas.

⚠ CAUTION

Avoid grading or evaluating students' messy ideas for completeness or accuracy.

LEVEL UP

- Have students share their initial ideas with a partner and discuss any similarities or differences.
- Have students share with a partner about how they will use their initial ideas to solve the problem.
- Have students share challenges they faced when writing down their messy ideas.

⬇ DOWNLOAD +1 TRY ANOTHER HOW'D IT GO?