UNIT 7 · STANDARD 6.EE.7

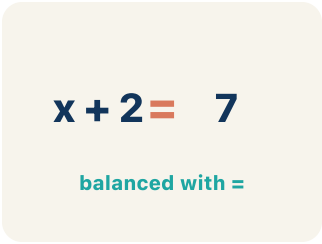
Solve Multiplication and Division Equations

Lesson 7-3

Name: Type your name **Date:** Today's date **Class:** Class period

Key Vocabulary Level 2 Standard

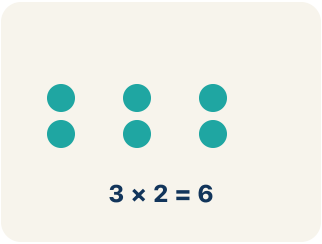
Picture first, then the word, then a plain-language meaning. Say each word out loud.



Multiplication and division are inverses: 3 × 7 = 21, so 21 ÷ 3 = 7

Inverse operation

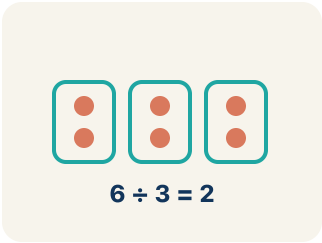
Write the definition:



3 × 7 = 21 means 3 groups of 7 equals 21

Multiply

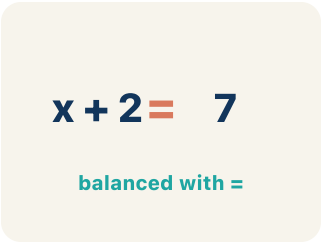
Write the definition:



36 ÷ 4 = 9 means 36 split into 4 equal groups gives 9 per group

Divide

Write the definition:



3x = 21 → divide both sides by 3 → x = 7 (x is alone)

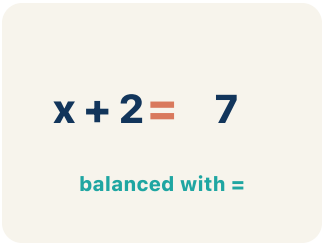
Isolate

Write the definition:

In 6x = 18, the coefficient is 6; divide both sides by 6 to get x = 3.

Coefficient

Write the definition:



x = 3 is the solution of 6x = 18 because 6 × 3 = 18.

Solution

Write the definition:

Guided Notes Level 2 Standard

🎯 **WHAT WE'RE LEARNING TODAY**

I can solve one-step multiplication and division equations using inverse operations.

✏️ **Fill in each blank as we go. Use the Word Bank to help you.**

📚 **WORD BANK — FILL EACH BLANK WITH THE BEST WORD**

Inverse operation | Multiply | Divide | Isolate | Coefficient | Solution

☝️ *Tap any word to see what it means and a picture.*

1. An operation that undoes another, like division undoing multiplication, is an _____.

2. To undo dividing by a number, I _____ both sides by that number.

3. To undo multiplying by a number, I _____ both sides by that number.

4. To get the variable alone on one side is to _____ it.

5. The number multiplied by a variable is the _____.

6. The value of the variable that makes an equation true is the _____.

🧱 Watch & Try — Worked Examples

See the notes in action: watch one worked all the way through, then try the next with the same steps.

👀 I do — watch

Follow each step as your teacher solves it.

Problem: Solve: 6x = 42

A. x = 7

B. x = 48

C. x = 36

D. x = 252

Step 1 Divide both sides by 6: x = 42 ÷ 6 = 7.

Step 2 Check: 6 × 7 = 42 ✓

✅ **Answer:** A. x = 7

🧩 Try — put the steps in order

Drag the cards (or use the ▲▼ buttons) to put the solution steps in the right order, then press **Check**.

Check: 6 × 7 = 42 ✓

Divide both sides by 6: x = 42 ÷ 6 = 7.

🤝 We do — together

Solve this one with your class using the same steps.

Problem: Solve: n / 3 = 8

A. n = 24

B. n = 11

C. n = 5

D. n = 3

Step 1 _____

Step 2 _____

Answer: _____

✏️ **You do — your turn**

Now try one on your own. Show every step.

Problem: Solve: 9m = 63

A. m = 7

B. m = 54

C. m = 72

D. m = 567

Show your work:

Try It

Solve on your own. Check the answer key when you are done.

1. Vault B is sealed with x / 3 = 6. Crack the lock: what is x?

A. x = 18

B. x = 2

C. x = 9

D. x = 3

Show your work:

2. Vault C is sealed with 5n = 45. Crack the lock: what is n?

A. n = 9

B. n = 225

C. n = 40

D. n = 50

Show your work:

Stretch Your Thinking

Level 2 enrichment

Challenge task — explain your reasoning in full sentences.

A bakery packed muffins into boxes of 8. They made 96 muffins total. Write an equation, solve it, and explain why your answer is reasonable. Then write a different situation that uses division and has the same answer.

Sentence starter: Equation: ____. Solving: ____. The answer ____ is reasonable because ____. A division situation with the same answer: ____.

Show your work:

Reflect — Exit Ticket

Solve: w / 8 = 6

A. w = 48

B. w = 14

C. w = 0.75

D. w = 2

Your answer: