UNIT 7 · STANDARD 6.EE.6

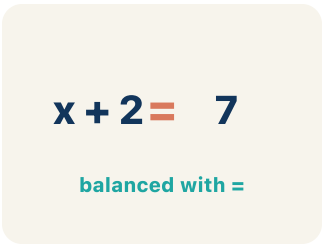
Write Equations

Lesson 7-1

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

Key Vocabulary Level 2 Standard

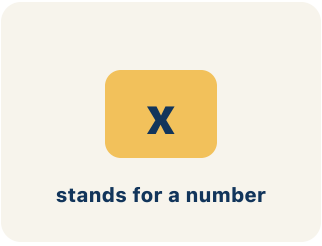
Picture first, then the word, then a plain-language meaning. Say each word out loud.



x + 5 = 12 means 'some number plus 5 equals 12'

Equation

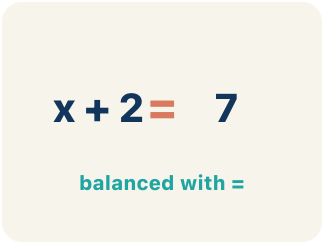
Write the definition:



In n + 3 = 10, the letter n stands for the unknown number (n = 7)

Variable

Write the definition:



7 + 3 = 10 — both sides equal 10

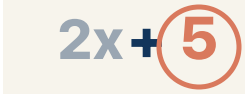
Equal sign

Write the definition:

2x + 5 is an expression; it becomes an equation when you write 2x + 5 = 15

Expression

Write the definition:

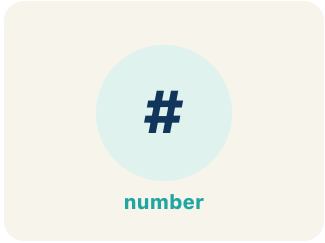


constant = 5 (fixed)

In x + 7 = 12, the numbers 7 and 12 are constants; only x can change.

Constant

Write the definition:



number

In n + 5 = 12, n is the unknown; you solve to find n = 7.

Unknown

Write the definition:

Guided Notes Level 2 Standard

🎯 **WHAT WE'RE LEARNING TODAY**

I can write an equation to represent a real-world situation.

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

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

Equation | Variable | Equal sign | Expression | Constant | Unknown

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

1. A math sentence that says two amounts are equal, with an = sign, is an _____.

2. A letter that stands for an unknown number is a _____.

3. The symbol = that shows two amounts are the same is the _____.

4. A group of numbers and variables with no equal sign is an _____.

5. A fixed number that does not change is a _____.

6. The value you are trying to find in an equation 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: Which equation represents: 'A number plus 12 equals 30'?

A. n + 12 = 30

B. n − 12 = 30

C. 12n = 30

D. n / 12 = 30

Step 1 'Plus' means addition, so the equation is n + 12 = 30.

✅ **Answer:** A. n + 12 = 30

🤝 We do — together

Solve this one with your class using the same steps.

Problem: Which equation represents: 'Seven less than a number is 18'?

A. n − 7 = 18

B. 7 − n = 18

C. n + 7 = 18

D. n / 7 = 18

Step 1 _____

Step 2 _____

Answer: _____

✏️ **You do — your turn**

Now try one on your own. Show every step.

Problem: Which equation represents: 'Three times a number equals 21'?

A. 3n = 21

B. n + 3 = 21

C. n − 3 = 21

D. n / 3 = 21

Show your work:

Try It

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

1. The lab tech says: '5 times the number of evidence bags b equals 35.' Which equation represents this clue?

A. 5b = 35

B. b + 5 = 35

C. b − 5 = 35

D. b / 5 = 35

Show your work:

2. A torn note reads: 'A suspect's case minutes m, after 9 fewer, leaves 24.' Which equation fits?

A. m − 9 = 24

B. m + 9 = 24

C. 9m = 24

D. m / 9 = 24

Show your work:

Stretch Your Thinking

Level 2 enrichment

Challenge task — explain your reasoning in full sentences.

Write a real-world situation that can be modeled by the equation n / 5 = 9. Explain what n represents and verify your equation makes sense.

Sentence starter: Situation: ____. In this problem, n represents ____. Check: n = ____ because ____ ÷ 5 = 9.

Show your work:

Reflect — Exit Ticket

Which equation represents: 'A number divided by 6 equals 9'?

A. n / 6 = 9

B. 6n = 9

C. n − 6 = 9

D. n + 6 = 9

Your answer: