# Understand Equations and Their Solutions

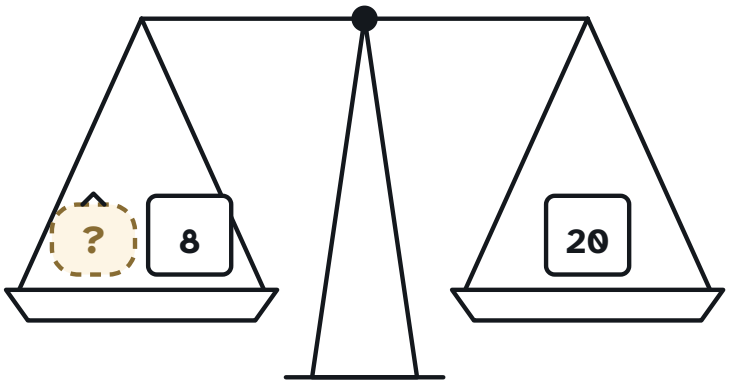
Write an equation for a situation and check whether a value is a solution.

**Name** _____ **Date** _____

### Tonight's spark

An escape-game clue card says: some stolen gems plus 8 more equals 20 gems. How many gems were stolen at first?

**Make a guess first: is the number more than 10, or less?**




**Our class model: match the words to symbols**

## Try it

Work it out on paper. Write one answer on each line.

**1** **Which of these is an equation?**

**A.** x + 5 **B.** x + 5 = 12 **C.** 12 + 5 **D.** n × 3

**My answer** _____

**2** **In the equation n + 4 = 9, which part is the variable?**

**A.** 4 **B.** 9 **C.** n **D.** +

**My answer** _____

**3** **Which value is the solution of x + 3 = 9?**

**A.** 6 **B.** 12 **C.** 3 **D.** 9

**My answer** _____

**4** **Sam had 12 stickers and gave away s stickers. He has 7 left. Which equation matches?**

**A.** s − 12 = 7 **B.** 12 + s = 7 **C.** 12 × s = 7 **D.** 12 − s = 7

**My answer** _____

**5** **Is y = 4 a solution of 3y = 12?**

**A.** No, because 3 × 4 = 7 **B.** No, because 4 is not 12 **C.** Yes, because 3 × 4 = 12

**D.** Yes, because 3 + 4 = 12

**My answer** _____

### Talk about it

What does the letter stand for in your equation? Which number makes both sides equal?

### Home mission

Hide some coins in a cup. Put 3 more coins next to it. Say, «The cup plus 3 coins is 10 coins.» Can your student write n + 3 = 10? Then test a guess by putting it in for n.

### If we get stuck, ask

- What number are we trying to find? Let's pick a letter for it.
- What does the word 'plus' tell us to write? And the word 'equals'?
- Read the clue out loud. What is each part telling us to do?

**Do it on a screen**

Scan or type the link. Same lesson, with hints.

**eduwonderlab.com/lessons/8-1/homework.html**

**How did it feel? (optional)**

Tricky Getting there Got it