Write and Solve Equations Using Multiplication or Division

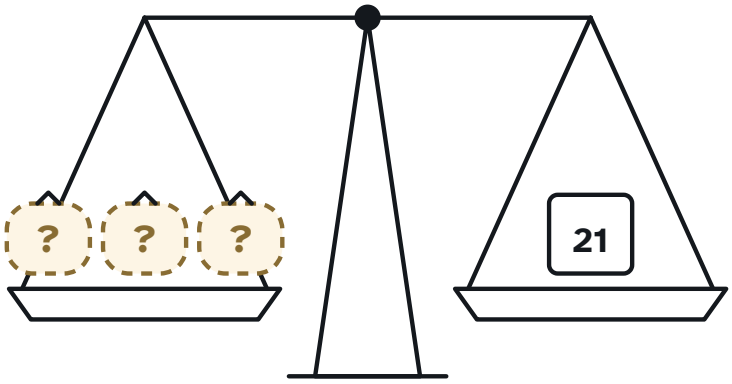
Solve equations that multiply or divide by doing the opposite to both sides.

Name _____ **Date** _____

Tonight's spark

At a family escape game, Detective Park locks 21 clues in 3 identical boxes. Every box holds the same number of clues. How many clues are in one box?

Guess first: are there more than 10 clues in one box, or fewer?



Our class model: undo it on both sides

Try it

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

1 **What undoes multiplying by 4?**

A. Multiplying by 4 **B.** Dividing by 4 **C.** Adding 4 **D.** Subtracting 4

My answer _____

2 **Solve: 3x = 12**

A. 36 **B.** 9 **C.** 4 **D.** 15

My answer _____

3 **Solve: 5n = 35**

A. 7 **B.** 30 **C.** 175

My answer _____

4 **In 8g = 56, what do you do to both sides?**

A. Subtract 8 **B.** Multiply by 8 **C.** Divide by 56 **D.** Divide by 8

My answer _____

5 **A pack holds 4 pencils, so 4p = 24 shows how many packs hold 24 pencils. What is p?**

A. 20 **B.** 6 **C.** 28 **D.** 96

My answer _____

6 **Which value is the solution of 7z = 42?**

A. 35 **B.** 294 **C.** 6 **D.** 49

My answer _____

Talk about it

What operation undoes multiplying by 3? What did you do to both sides?

Home mission

Count out 21 beans. Deal them one at a time into 3 cups, like dealing cards. Before counting, ask: how many are in each cup? What equation shows 3 cups with the same amount and 21 in all?

If we get stuck, ask

- Is the letter being multiplied or divided? What is the opposite?
- Did we do the same operation to both sides?
- Let's put the answer back in and check if it is true.

Do it on a screen

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

eduwonderlab.com/lessons/8-3/homework.html

How did it feel? (optional)

Tricky Getting there Got it