Learning as easy as 123

# Solving One-Step Equations on the ISEE <br> All Levels 

LESSON GOAL: Learn a foolproof way to solve any one-step equation on the ISEE.

ISEE Question: When a number is tripled, the result is fifteen. What is twice the number?
(A) 3
(B) 5
(C) 7
(D) 10

Solution: Let's focus on the only two "mathematical" words in the first sentence: "tripled" and "fifteen."
STEP 1: To translate the sentence into a mathematical equation, we can use "b" as for the unknown variable ("a number," the problem calls it), and remember that "is" means " $=$ ". Our equation will read " $\mathbf{3 b}=\mathbf{1 5}$ ".

STEP 2: Now, you probably already figured out that $3 \times 5=15$ and, therefore, our number $b=5$. But if the equation were a bit more complicated, say " $7 \mathrm{~b}=12$ ", then you'd have to isolate the by dividing by 7 on both sides. The result will be

$$
b=\frac{12}{7}=1 \frac{5}{7}
$$

STEP 3: If you already picked B), you fell into one of the most common ISEE traps: picking the correct answer to the question you thought you were given and not to the question you were actually given. In this case, we are looking for "twice the number," so the answer is $5 \times 2=10$, or D ).

Helpful Tip: Always circle what the question is asking for when you first read it (in this case, the words "twice the number") and have a look at that again before you bubble in your answer choice.

