

Linear Equations in One Variable- Step-by-Step Lesson**Lesson 1 Linear Equations:**

a) How many solutions does this equation have?

$$12r - 4 = 11r$$

a. no solution

b. one solution

c. infinitely many solutions

**Explanation:**

We know that if solving an equation yields a statement that is false, like $5=3$, then the equation has no solution.

If we can produce an equation solving a statement that is true for a single value, like $x=2$, the equation will have one solution.

An equation statement that is always true, like $2=2$, has many solutions.

$$12r - 4 = 11r$$

$$-4 = -r$$

$$4 = r$$

The statement $4 = r$ has a single value.

So, the equation has one solution.

