**Equations in One Variable**

**Solve Equations with Rational Coefficients**



**Solve *k* = –21. Check your solution.**  


Write the equation.

Multiply each side by the reciprocal of −.

Simplify.

Check the solution by replacing *k* with 24.

− *k* = −21 Write the equation.

− (24)  −21 Replace *k* with 24.

−21 28 Multiply.

−21 = −21 **🗸** The sentence is true.



**José correctly answered 80% of the questions on a language arts quiz. If he answered 16 questions correctly, how many questions were on the language arts quiz? Define a variable. Then write and solve an equation for this situation.**

Let *q* = the number of questions on the quiz.

Write the equation.

Division Property of Equality

Simplify.



So, there were 20 questions on the language arts quiz.