**Equations in One Variable**

**Solve Equations with Rational Coefficients**



 **Solve** $-\frac{7}{8}$***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.