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LESSON

## Challenge Practice

For use with the lesson "Write Equations and Inequalities"

## Solve the equation using mental math.

1. $\frac{12(x+1)}{x}=15$
2. $\frac{6 x}{x-2}=2 x$
3. $\frac{2 x+1}{x}=\frac{5 x}{2 x}$
4. $\frac{x^{2}+1}{x}=\frac{3 x+1}{x}$
5. $\frac{x+3}{x^{2}-1}=\frac{4 x-2}{7 x+2}$
6. A father is 5 s years more than twice as old as his son. The difference in their ages is 25 years. How old is the father?
7. You and a friend empty your pockets and compare how many quarters you have. You tell your friend that you have 5 times as many quarters as he has, and he tells you that you have 12 more quarters than he has. How many quarters does your friend have?
8. Your school club has a bake sale to raise money. Your club offers muffins for $\$ .50$ each and bagels for $\$ .75$ each. In one hour you raise $\$ 21$ by selling 34 items. How many muffins did you sell?

## Algebra 1

