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.
$$\frac{6x}{x-2} = 2x$$

3.
$$\frac{2x+1}{x} = \frac{5x}{2x}$$

4.
$$\frac{x^2+1}{x} = \frac{3x+1}{x}$$

5.
$$\frac{x+3}{x^2-1} = \frac{4x-2}{7x+2}$$

- **6.** A father is 5s 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?