Solve the equation. Check your solution.

1. $x + 16 = 9x$

2. $4y - 70 = 12y + 2$

3. $5(p + 6) = 8p$

4. $3(g - 7) = 2(10 + g)$

5. $1.8 + 7n = 9.5 - 4n$

6. $\dfrac{3}{7}w - 11 = -\dfrac{4}{7}w$

7. One movie club charges a $100 membership fee and $10 for each movie. Another club charges no membership fee but movies cost $15 each. Write and solve an equation to find the number of movies you need to buy for the cost of each movie club to be the same.