Solve each system using substitution. Check your solution. May use a calculator for computation.

1. $x + 2y = 200$
   $x = y + 50$

2. $3x - 2y = 0$
   $x + y = -5$

3. $2x + 4y = -6$
   $x - 3y = 7$

4. $5x - 3y = -4$
   $x + y = -4$

5. $4x + 3y = -3$
   $2x + y = -1$

6. $-5x + y = 6$
   $2x - 3y = 60$

7. You have $28.00 in your bank account and start saving $18.25 every week. Your friend has $161.00 in his account and is withdrawing $15 every week. Define variables, write an equation for each situation and use substitution to solve for when your account balances will be the same. How much money will you have at this point?

8. Suppose you want to join an on-line movie service. Big Video offers a special discount card that costs $9.99 for one year. With the discount card, each movie costs $2.49. A discount card from Main Street Video costs $20.49 for one year. With the Main Street Video card, each movie upload costs $1.79. After how many movies is the cost the same?

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