Systems of Linear Equations in Two Variables

In problems 1-2, solve each system of equations by graphing.

1. $y = 4x$ $y = 5x - 1$	2. $7x - y = 11$ $4x + 5y = 23$

In problems 3-5, solve the system of equations using substitution.

3. $y = \frac{1}{4}x - 3$ $2y - x = 10$	4. $x = \frac{1}{3}y$ $8x - y = 10$
5. $3x - 7y = 5$ $x - y = 0$	

In problems 6-8, solve the system of equations using elimination.

6. $x + y = 3$ $4x - y = 12$	7. $5x + y = 1$ $x - 2y = 9$
8. $\frac{1}{3}x + \frac{1}{4}y = -1$ $x - 4y = 54$	

In problem 9, use either substitution or elimination to show that the system is inconsistent.

9 $8x - y = 2$ $16x - 2y = 5$	

In problem 10, use either substitution or elimination to show that the system is consistent and its equations are dependent.

10. $x + 3y = 2$ $3x + 9y = 6$	