Preface

Here are a set of problems for my Algebra notes. These problems do not have any solutions available on this site. These are intended mostly for instructors who might want a set of problems to assign for turning in. I try to put up both practice problems (with solutions available) and these problems at the same time so that both will be available to anyone who wishes to use them.
Linear Systems with Two Variables

For problems 1 – 5 use the Method of Substitution to find the solution to the given system or to determine if the system is inconsistent or dependent.

1. \[8x + y = 13\]
   \[3x + 4y = -6\]

2. \[x - 3y = 7\]
   \[-2x + 6y = 4\]

3. \[-12x + 6y = -12\]
   \[4x + 2y = -2\]

4. \[3x + 6y = 12\]
   \[-4x - 7y = -12\]

5. \[12x - 6y = 18\]
   \[4x - 2y = 6\]

For problems 6 – 10 use the Method of Elimination to find the solution to the given system or to determine if the system is inconsistent or dependent.

6. \[-5x + 10y = 1\]
   \[x - 2y = -8\]

7. \[7x + 6y = 0\]
   \[2x + 3y = 0\]

8. \[-8x + 24y = 12\]
   \[10x - 30y = -15\]

9. \[-2x + 3y = 24\]
   \[3x - 8y = -57\]
10. \(6x + 4y = -20\)
\[7x + 3y = -35\]