Solving a System of Two Linear Equations in Two Variables by Substitution

Solve each system by substitution.

1) $y = -4x + 16$
$-3x + 8y = 23$

2) $-3x + 6y = -24$
$y = 7x + 22$

3) $y = 5x + 5$
$y = x + 5$

4) $y = 4x + 22$
$y = -4x - 18$

5) $x - 3y = -12$
$4x + 6y = -12$

6) $2x - 5y = 22$
$x + 5y = -4$

7) $y = -4$
$-3x - 6y = 15$

8) $2x + 4y = -10$
$7x + 8y = -23$

Answers to Solving a System of Two Linear Equations in Two Variables by Substitution

1) $(3, 4)$
2) $(-4, -6)$
3) $(0, 5)$
4) $(-5, 2)$
5) $(-6, 2)$
6) $(6, -2)$
7) $(3, -4)$
8) $(-1, -2)$