

## Homework 3.2 -Solving with Brackets and Fractions

Date \_\_\_\_\_

**Solve each equation.**

1)  $225 = 5(3 - 6x)$

 $\{-7\}$ 

2)  $4(5n - 6) + 3n = -208$

 $\{-8\}$ 

3)  $-7(4 - 3r) = -196$

 $\{-8\}$ 

4)  $-8p - 6 = -2(-1 + 2p)$

 $\{-2\}$ 

5)  $37 - 6k = -7(2k - 3) + 6k$

 $\{-8\}$ 

6)  $4x + 12 = 6(4 + 3x) - 2x$

 $\{-1\}$

$$7) 3(1 + 5k) = -2(k + 7)$$

$$\{-1\}$$

$$8) -5(1 - 6x) = 7(4x - 5)$$

$$\{-15\}$$

$$9) -6(a - 1) = 5a - 7(a - 6)$$

$$\{-9\}$$

$$10) 9x - 10 + x = 9(4x - 4) - 2(8x + 2)$$

$$\{3\}$$

**Solve each equation. First find the common denominator!**

$$11) \frac{y}{12} = \frac{2}{3}$$

$$y=8$$

$$12) \frac{m}{4} = \frac{m}{5} + 1$$

$$m = 20$$

$$13) \frac{p}{2} - \frac{3p}{4} = \frac{3}{4} - p$$

$p = 1$

$$14) \frac{x+1}{3} = \frac{x-1}{5}$$

$x = -4$

$$15) \frac{n-1}{3} + \frac{n+2}{6} = 7$$

$n = 14$

$$16) \frac{w+1}{2} - \frac{w-7}{6} = 3$$

$w = 4$

$$17) 4 = \frac{k+1}{3} + \frac{k+5}{5}$$

$k = 5$

$$18) \frac{2x+1}{3} - \frac{x+4}{5} = 7$$

$x = 16$