

**Algebra Review – Solving Equations**

Solve the following equations for x. You must show your work!

1.  $8x - 3 = 29$

2.  $\frac{1}{2}x + \frac{2}{3} = \frac{5}{6}$

3.  $5x - 3 = 4x + 7$

4.  $\frac{3}{4}x - \frac{1}{3} = \frac{1}{6} + \frac{2}{3}x$

5.  $\frac{x+1}{5} + 2 = \frac{1}{2}$

6.  $3(2x - 5) + 1 = 10$

$$7. 2(x-1) + 3x = 3$$

$$8. 5(2x+3) = 4x-3$$

$$9. 3(x-2) + 2x - 5 = x + 3 + 6(x+1)$$

$$10. 2(3x+1) - 3(x-2) = 4(x-5) - 2x + 8$$

Answers: 1.  $x=4$  2.  $x=1/3$  3.  $x=10$  4.  $x=6$  5.  $x=-17/2$  6.  $x=4$  7.  $x=1$  8.  $x=-3$  9.  $x=-10$  10.  $x=-20$