Name: Date: Period:

Please show ALL your work to solve these equations in your notebook.

Equations with parenthesis and a Variable and a constant on both sides of equal sign. You must DISTRIBUTE first, then **ELIMINATE** the smaller variable by moving it to the other side of the equal sign.

1. $4(x + 5) = 2(x + 6)$
2. $-5(y + 7) = 3y + 29$
3. $a + 3 = 5(2a – 3)$
4. $2m – 29 = 3(4m – 3)$
5. $3(x + 5) = 5x + 7$
6. $7(x + 2) = 5(x + 4)$
7. $3(a – 5) = 2(2a + 1)$
8. $5m + 17 = 2(m – 5)$
9. $3(2x + 1) = x + 8$
10. $2(3x – 1) = 2(x + 1)$
11. $3(x – 2) = 2(x – 1)$
12. $3(2x – 1) = 5(3x – 6)$

Review. Solve the equations using the appropriate methods discussed in class.

1. $\frac{x}{-8} + 3 = -2$
2. $7x + 12 = -51$
3. $-41 = -6x – 17$
4. $9x – 2 – 16x + 13 = 25$
5. $-8x = -21 – 11x$
6. $6x = -27 – 3x$
7. $-10 = \frac{x}{3} - 6$
8. $9 – 5x = 7x + 45$
9. $5(2x – 8) = -60$
10. $9x – 7 – 4x – 14 = -1$
11. $8 = 8(4x + 9)$
12. $5(x – 1) = 9 – 2x$