Homework Section 4.1

Fill in appropriate numbers to make each equation true (complete the square trinomial)

1. (x + \_\_\_)2 = x2 - 12x + \_\_\_\_
2. (x + \_\_\_\_ )2  = x2 + 16x + \_\_\_\_\_\_
3. (x + \_\_\_\_ )2  = x2 + 24x +\_\_\_\_\_\_\_
4. (x + \_\_\_\_ )2  = x2 + 5x + \_\_\_\_\_\_\_
5. (x + \_\_\_\_ )2  = x2 – 7x + \_\_\_\_\_\_
6. (x + \_\_\_\_ )2  = x2 + x + \_\_\_\_\_\_\_

Solve by completing the square

1. x2  + 2x + 2 = 0
2. x2 – 12 x + 7 = 3
3. x2 + 8x – 3 = 9
4. 3x2 – 24x – 9 = 0
5. 5x2 + 30x + 55 = -50
6. 3x2 – 7x – 2 = 0
7. 4x2 + 5x + 8 = 7
8. 2x2 – 11x – 7 = 4