

Name: \_\_\_\_\_

MPS21 Homework 1

In 1 – 5, perform the indicated operation and simplify:

1.  $(6x + 5) - (8x + 15)$

2.  $-5z(3z - 1)$

3.  $(x^2 - 3x + 9)(x + 3)$

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

5.  $(2x - 5y)^2$

In 6 – 14, factor the expression completely over the real numbers.

6.  $4x^3 - 6x^2 + 12x$

7.  $16y^2 - 9$

8.  $x^2 - 4x + 4$

9.  $s^2 - 5s + 6$

10.  $t^2 - t - 6$

11.  $x^2 - 30x + 200$

12.  $12x^2 + 7x + 1$

13.  $4x^2 - 5$

14.  $(x - 11)^2 - 25$