Test 2 MAT 191 Fall 2002 Name_____

Simplify all answers and show your work!

1. Multiply: $(x-2)(x^2+3x-5)$

2. Multiply: $(x-6)^2$

3. Divide. $\dfrac{14r^4-7r^3+28r^2}{-7r^3}$

4. Divide. $\dfrac{x^3-9x^2+25x-21}{x-3}$

5. Plot the following points: (1, 3), (-2, 4), (5, 2)

6. Multiply: (2x + 5)(3x – 2)

7. Find the slope of the line through the points (2, -4) and (5, -1).

8. Graph the line 3x + 2y = 6

9. Add. $(-11z^2+3z+1)+(-7z^2+6z-4)$

10. Subtract. $(3a^4-7a^2+5)-(4a^4+2a^2-9)$

11. Find the equation of the line through the point (3, -2) with a slope $-\frac{5}{3}$.

12. Find the equation of the line through the point (1, 2) parallel to the line $2x + 7y = -5$.

13. Find the slope of the line given by the equation $4x - 5y = 13$.

14. Find the equation of the line through the point (2, -3) and perpendicular to the line $3x + 4y = 7$.

15. Find the equation of the line passing through the points (2, 4) and (-4, -5).