

Test 2

MAT 191

Winter 2002

Name _____

Simplify all answers and show your work!

1. Plot the points $(-3, -5)$, $(4, 6)$, and $(-2, 0)$ on a Cartesian graph.

2. Graph $4x + 3y = 12$.

3. Find the slope of the line through the points $(-2, 5)$ and $(3, -2)$.

4. Find the slope of the given line: $4x + 3y = 12$

5. Given $5x - y = 6$, find three points on the line. 6. Multiply: $(x - 3y)(x^2 + 3xy - 4y^2)$

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

8. Divide. $\frac{x^3 - 6x^2 - 13x + 20}{x - 4}$

9. Simplify: $\sqrt[3]{-125x^6}$

10. Simplify: $\left(\frac{c^6}{x^3}\right)^{\frac{2}{3}}$

11. Simplify: $\sqrt{50}$

12. Multiply: $(x + 3)^2$

13. Simplify: $\sqrt{\frac{a^4}{121}}$

14. Simplify: $\frac{(64x^3)^{\frac{3}{2}}}{x^{\frac{1}{2}}}$

15. Simplify: $81^{-\frac{3}{4}}$