



## MATH Placement Test - A

Name \_\_\_\_\_

### **EXAM INSTRUCTIONS**

- Your cell phone must be off. You cannot use a calculator.
- You must show all your work. Work neatly. Poor presentation might result on an F.

1. Evaluate when  $a = -\frac{2}{3}$ ,  $b = 4$ ,  $c = -1$  and  $d = \frac{5}{2}$

a.  $\frac{2ac}{b} \div (-c) =$

b.  $3dc - (4c)^2 =$

2. Operate and simplify:

a.  $\frac{x^2}{x^2 + 3x - 18} - \frac{2x}{x + 6} + \frac{x}{x - 3} =$

b.  $(-2x^3)^2 =$

c.  $\left(\frac{-16x^7y^2}{36x^3y^5}\right) =$

d.  $(x-1)^2 - x^2 =$

e.  $(x-1)(x+2) - x^2(5-2x) + 3x =$

3. Solve the following equations.

a.  $\frac{x}{x+2} = \frac{6}{x+5}$

b.  $2x(3x-4)(2x+1) = 0$

c.  $|3x-2| = \frac{5}{4}$

4. Solve the following inequality. Write the solution in interval form.

$$3x - 2(x+1) < -x + 3(x+2)$$

5. Sketch the graph of  $2x - 3y = 2$  showing clearly the x and y intercepts.

