

Algebra II  
First Semester Review for Final Exam  
Chapters 1 and 2

Name KEY

Chapter 1:

(1.2) Evaluate the Expression for the given value of the variable. Include work!

1.  $-y + (5+x)^2$ ,  $x=2$ ,  $y=4$

$$\begin{aligned} & -4 + (5+2)^2 \\ & -4 + 7^2 \\ & \boxed{45} \end{aligned}$$

2.  $8x^3 + 6x^2$ ,  $x=-2$

$$\begin{aligned} & 8(-2)^3 + 6(-2)^2 \\ & -64 + 24 \\ & \boxed{-40} \end{aligned}$$

(1.2) Simplify the Expression

3.  $3y^2 + 5(2y^2 - 1) - 7$

$$\begin{aligned} & 3y^2 + 10y^2 - 5 - 7 \\ & \boxed{13y^2 - 12} \end{aligned}$$

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

$$\begin{aligned} & 5 - 3x + 12 + 2x \\ & \boxed{-x + 17} \end{aligned}$$

(1.3) Solve the Linear Equation – Include Work!

5.  $-3x - 7 = -x + 17$

$$\begin{aligned} & -2x = 24 \\ & \boxed{x = -12} \end{aligned}$$

6.  $4(x - 3) = 2(x + 8)$

$$\begin{aligned} & 4x - 12 = 2x + 16 \\ & 2x = 28 \\ & \boxed{x = 14} \end{aligned}$$

7.  $\frac{3}{4}x - 3 = 7$

$$\begin{aligned} & \frac{3}{4}x = 10 \\ & \boxed{x = 40/3} \end{aligned}$$

$$\frac{3x}{4} = 10$$

8.  $5 - (3x - 2) = 10 - 3(x + 1)$

$$\begin{aligned} & 5 - 3x + 2 = 10 - 3x - 3 \\ & 7 - 3x = -3x + 7 \\ & \boxed{\text{infinitely many}} \end{aligned}$$

9.  $\left(\frac{2}{3}x - \frac{1}{4} = x + \frac{5}{6}\right) \times 12$

$$\begin{aligned} & 8x - 3 = 12x + 10 \\ & -13 = 4x \\ & \boxed{x = -13/4} \end{aligned}$$

(1.3) Write an equation and Solve.

10. During one shift, a waiter earns a wage of \$30 per shift and gets an additional 15% in tips from customer food bills. The waiter earns \$105 in one shift. What is the total of the customers' food bills?

$$\begin{aligned} 30 + .15x &= 105 \\ .15x &= 75 \\ x &= 500 \end{aligned}$$

(1.4) Solve the formula for the given variable. Then use the given information to find the value of the variable.

11. The formula  $S = 2\pi rh + 2\pi r^2$  gives the Surface Area of Cylinder with height of  $h$  and radius  $r$ .  
a.) Solve for  $h$

$$\begin{aligned} S &= 2\pi rh + 2\pi r^2 \\ \cancel{2\pi r}h &= \frac{S - 2\pi r^2}{2\pi r} & h &= \frac{S - 2\pi r^2}{2\pi r} \end{aligned}$$

- b.) Find  $h$ , if  $r = 5$  cm and  $S = 400$  cm<sup>2</sup>

$$h = \frac{(400 - 2\pi 5^2)}{(2\pi 5)} = 7.73$$


(1.4) Solve the equation for  $y$ . Then find the value of  $y$  given  $x$ .

12.  $4y - 9x = -30$ ;  $x = 6$


$$\begin{aligned} 4y &= -30 + 9x \\ y &= \frac{-30 + 9x}{4} & y &= 21 \end{aligned}$$

(1.6 & 1.7) Solve each equation or inequality below. FOR ANY INEQUALITIES – GRAPH YOUR SOLUTIONS on a Number Line! Show all your work!

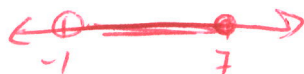
13.  $8x - (3 - 2x) > x + 6$

$$\begin{aligned} 8x - 3 + 2x &> x + 6 \\ 10x - 3 &> x + 6 \\ 9x &> 9 \\ x &> 1 \end{aligned}$$



14.  $2x + 9 > 3$  or  $-5x + 1 \leq 0$

$$\begin{aligned} 2x &> -6 & -5x &\leq -1 \\ x &> -3 & \text{or} & x \geq \frac{1}{5} \end{aligned}$$


15.  $-9 \leq 5 - 2x < 7$

$$\begin{aligned} -14 &\leq -2x < 2 \\ \frac{-14}{-2} &\geq x > \frac{2}{-2} \\ 7 &\geq x > -1 \end{aligned}$$


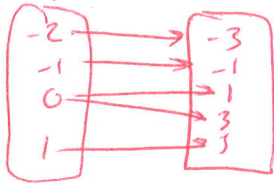
16.  $\left| \frac{1}{3}x + 7 \right| = 8$

$$\begin{aligned} \frac{1}{3}x + 7 &= 8 & \text{or} & \frac{1}{3}x + 7 = -8 \\ \frac{1}{3}x &= 1 & & \frac{1}{3}x = -15 \\ x &= 3 & \text{or} & x = -45 \end{aligned}$$


**Chapter 2**

**(2.1) Consider the given relation. Identify the domain and range. Draw a Mapping Diagram. Then, tell whether the relation is a function.**

1.  $(-2, -3), (-1, -1), (0, 1), (0, 3), (1, 5)$



Domain:  $\{-2, -1, 0, 1\}$  Range:  $\{-3, -1, 1, 3, 5\}$

Function: ~~Yes~~ No

**(2.1) Tell whether the function is linear and then evaluate the function for the given value of x. Include work!**

2.  $f(x) = 2x + \frac{3}{2}$ ;  $f(1)$  yes

$$f(1) = 2(1) + \frac{3}{2} = 3\frac{1}{2}$$

3.  $f(x) = 2x^2 + x$ ;  $f(3)$  no

$$f(3) = 2(3)^2 + 3 = 18 + 3 = 21$$

**(2.2) Find the slope of the line passing through the given points. Then, tell whether the line is increasing, decreasing, horizontal, or vertical. Include Work!**

4.  $(-2, 4), (2, 5)$

$$m = \frac{5-4}{2-(-2)} = \frac{1}{4}$$

increasing

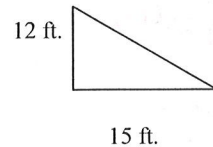
5.  $(3, 1), (3, -2)$

$$m = \frac{-2-1}{3-3} = \frac{-3}{0}$$

$\phi$  no slope  
vertical

6. You are measuring a bike ramp, which is 15 feet wide at its base and 12 feet tall at its tallest point. What is the slope of the bike ramp?

$$\frac{12}{15} = \frac{4}{5}$$



**(2.3) Find the x-intercept and the y-intercept of each of the following lines. Include Work!**

7.  $x - 2y + 2 = 0$

$$x - 2y = -2$$

$$\begin{aligned} \text{x-int: } & -2 \\ \text{y-int: } & 1 \end{aligned}$$

8.  $y = 3x + 3$

$$\begin{aligned} \text{x-int: } & -1 \\ \text{y-int: } & 3 \end{aligned}$$

9. For first time customers, a bank will open an account with \$25 included. This bank also charges a monthly \$2.95 service fee on the account.

- a. Write an equation that shows the balance  $B$  after  $m$  months, assuming no other activity is made on the account.

$$B = 25 - 2.95m$$

- b. Find the balance in the account after 8 months.

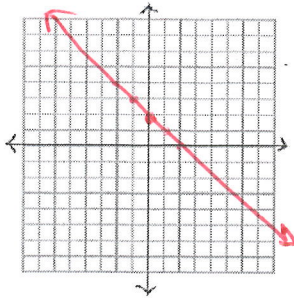
$$1.4$$

- c. What do the y-intercept and slope represent in your equation?

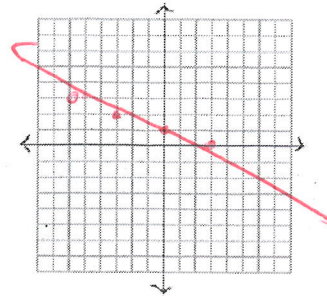
initial deposit      service fee

(2.3) Graph the equation. Include work for whichever method you choose!

10.  $y = -x + 2$

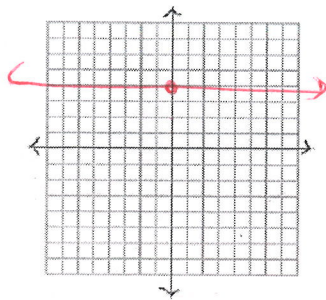


11.  $-\frac{1}{3}x - y = -1$



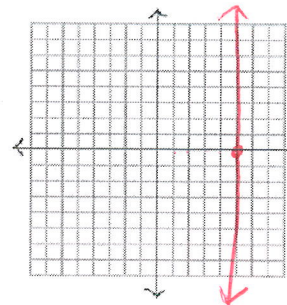
$y = \frac{1}{3}x + 1$

12.  $y - 4 = 0$



$y = 4$

13.  $-3x + 15 = 0$



$-3x = -15$   
 $x = 5$

(2.4) Write the equation of the line that has the given slope and goes through the given point.

14.  $m = 4$  (1, 5)

$y = 4x + b$

$5 = 4(1) + b$

$b = 1$

$y = 4x + 1$

15. Write the equation of the line that passes through the given points. (-3, 3), (2, 1)

$y = -\frac{2}{5}x + b$

$m = \frac{3-1}{-3-2} = \frac{2}{-5}$

$1 = -\frac{2}{5}(2) + b$

$1 = -\frac{4}{5} + b$

$y = -\frac{2}{5}x + \frac{9}{5}$

16. Write an equation of the line that passes through the given point, (-2, 3) and fits the following conditions. Include all work!

(a) Is parallel to the line  $y = 4x - 3$

(b) Is perpendicular to line  $y = 4x - 3$

$3 = 4(-2) + b$

$3 = -\frac{1}{4}(-2) + b$

$3 = -8 + b$

$3 = \frac{1}{2} + b$

$11 = b$

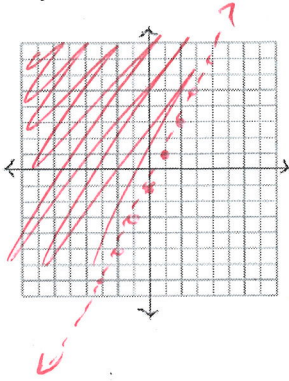
$2\frac{1}{2} = b$

$y = 4x + 11$

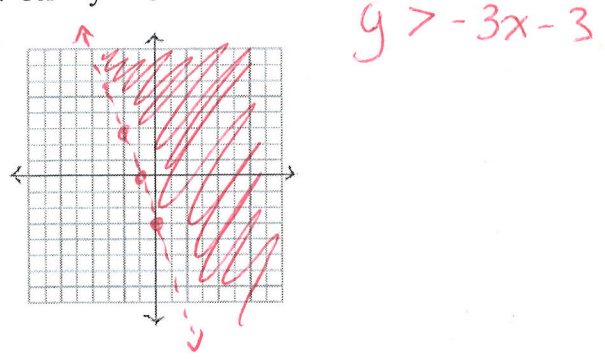
$y = -\frac{1}{4}x + 2\frac{1}{2}$

(2.8) Graph the following inequalities. Choose any method – include work!

18.  $y > 2x - 1$

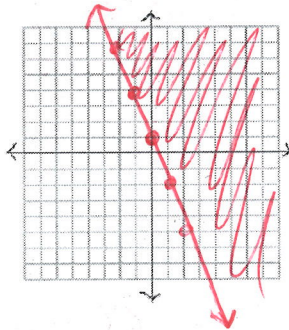


19.  $3x + y > -3$

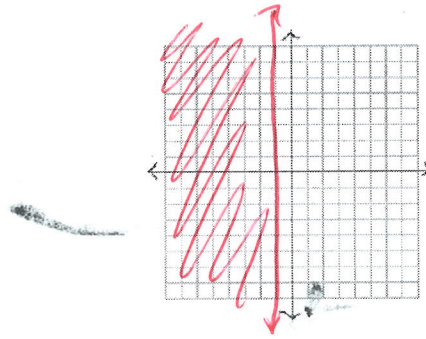


20.  $2 - y \leq 3x - 1$

$-y \leq 3x - 3$   
 $y \geq -3x + 3$



21.  $x \leq -1$



**Chapter 3:**

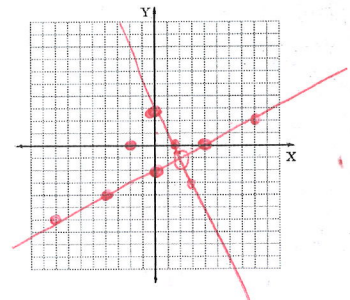
(3.1) Solve the Linear System by Graphing. Include all work and CHECK final answer!!!

1.)  $x - 2y = 4$        $4x + 2y = 6$

$$\begin{array}{r|l} x & y \\ \hline 0 & -2 \\ 4 & 0 \end{array}$$

$$\begin{array}{r|l} x & y \\ \hline 0 & 3 \\ 3/4 & 0 \end{array}$$

$(2, -1)$



(3.2) Solve the linear system by using Substitution or Elimination. Include all Work!

2.)  $x = 2y - 6$   
 $-5x + 12y = 20$

3.)  $5x - 7y = -3$   
 $3x + y = 19$

4.)  $5x + 4y = -18$   
 $2x + 3y = -24$

$$-5(2y - 6) + 12y = 20$$

$$-10y + 30 + 12y = 20$$

$$2y = -10$$

$$y = -5$$

$$x = 2(-5) - 6$$

$$x = -16$$

$(-16, -5)$

$$\begin{array}{r} 5x - 7y = -3 \\ + 21x + 7y = 133 \\ \hline 26x = 130 \end{array}$$

$$26x = 130$$

$$x = 5$$

$$15 + y = 19$$

$(5, 4)$

$$\begin{array}{r} 10x + 8y = -36 \\ - 10x + 15y = -120 \\ \hline -7y = 84 \end{array}$$

$$-7y = 84$$

$$y = -12$$

$$5x - 48 = -18$$

$$5x = 30$$

$$x = 6$$

$(6, -12)$

(3.2) Write a linear system of equations and solve algebraically. Include all Work!

5. You and your sister decide to combine your weekly overtime earnings for a birthday gift for your mother. Your overtime rate is \$18 per hour and your sister's overtime rate is \$24 per hour. The total amount earned for the gift was \$288. If you worked two more hours of overtime than your sister, how many hours of overtime did each of you work?

$$18x + 24y = 288$$

$$y + 2 = x$$

$$18(y+2) + 24y = 288$$

$$18y + 36 + 24y = 288$$

$$42y + 36 = 288$$

$$42y = 252$$

$$y = 6 \quad x = 8$$

(3.4) Solve the linear system by using Elimination. Include all Work!

6.  $x - 2y + 4z = -19$

$2x + y - 3z = 14$

$3x + y + 2z = 5$

$$x - 12 - 8 = -19$$

$$x - 20 = -19$$

$$x = 1$$

$$(1, 6, -2)$$

$$2x - 4y + 8z = -38$$

$$-2x + y - 3z = 14$$

$$-5y + 11z = 52$$

$$3x - 6y + 12z = -57$$

$$-3x + y + 2z = 5$$

$$-7y + 10z = -62$$

$$38y - 77z = 364$$

$$-35y + 50z = 310$$

$$-27z = 54$$

$$z = -2$$

$$-7y - 20 = -62$$

$$-7y = -42$$

$$y = 6$$

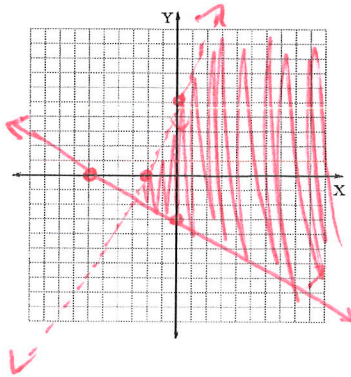
(3.3) Graph the Systems of Inequalities. Include all work!

7.)  $x + 2y \geq -6$

$5x - 2y > -10$

x	y
0	-3
-6	0

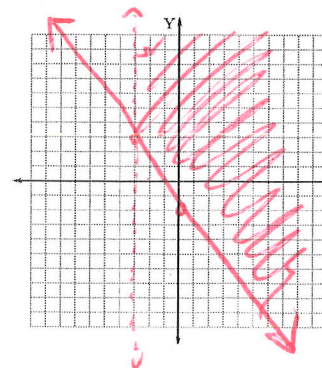
x	y
0	5
-2	0



8.)

$x > -3$

$y \geq -\frac{5}{3} - 2$



(3.4) Simplify. Write "undefined" for expressions that are undefined. Include all work!

9.  $-3 \begin{bmatrix} 1 & -3 \\ 0 & 2 \end{bmatrix} + \begin{bmatrix} -3 & 1 \\ -6 & 1 \end{bmatrix} =$

$$\begin{bmatrix} -3 & 9 \\ 0 & -6 \end{bmatrix} + \begin{bmatrix} -3 & 1 \\ -6 & 1 \end{bmatrix} = \begin{bmatrix} -6 & 10 \\ -6 & -5 \end{bmatrix}$$

10.  $-5 \left( \begin{bmatrix} -4 & 6 \\ 4 & 5 \end{bmatrix} - \begin{bmatrix} -2 & 4 \\ -6 & -3 \end{bmatrix} \right) =$

$$-5 \begin{bmatrix} -2 & 2 \\ 10 & 7 \end{bmatrix} = \begin{bmatrix} 10 & -10 \\ -50 & -35 \end{bmatrix}$$

11.  $\begin{bmatrix} -2 & 5 \\ 1 & 4 \end{bmatrix} \begin{bmatrix} -4 & 2 & 5 \\ 0 & -1 & 1 \end{bmatrix} =$   
 $\begin{bmatrix} -2 & 5 \\ 1 & 4 \end{bmatrix} \begin{bmatrix} 8 & -9 & 5 \\ -4 & -2 & 9 \end{bmatrix}$

12.  $\begin{bmatrix} 5 & 1 & -1 \\ -3 & -6 & -5 \end{bmatrix} \begin{bmatrix} -6 & -3 \\ -2 & -1 \\ 1 & -1 \end{bmatrix} =$   
 $\begin{bmatrix} 5 & 1 & -1 \\ -3 & -6 & -5 \end{bmatrix} \begin{bmatrix} -33 & -15 \\ 25 & 20 \end{bmatrix}$

(3.7) Evaluate Determinant. Include all work!

Work!  $\begin{vmatrix} + & - & + \\ -1 & 1 & -5 \\ 4 & -1 & 2 \\ 4 & 5 & 3 \end{vmatrix} =$

$-1 \begin{vmatrix} -1 & 2 \\ 5 & 3 \end{vmatrix} - 1 \begin{vmatrix} 4 & 2 \\ 4 & 3 \end{vmatrix} - 5 \begin{vmatrix} 4 & -1 \\ 4 & 5 \end{vmatrix}$   
 $-1(-13) - 1(4) - 5(24)$   
 $-111$

(3.8) Find the Inverse of Matrix—Include

14.  $\begin{bmatrix} 1 & 2 \\ 3 & 7 \end{bmatrix} = \frac{1}{1} \begin{bmatrix} 7 & -2 \\ -3 & 1 \end{bmatrix}$   
 $= \begin{bmatrix} 7 & -2 \\ -3 & 1 \end{bmatrix}$

(3.7) Solve the System Using Cramer's Rule. Include all work!

15.  $5x + 4y = -1$   
 $2x - y = 10$

$D = \begin{vmatrix} 5 & 4 \\ 2 & -1 \end{vmatrix}$   
 $= -13$

$D_x = \begin{vmatrix} -1 & 4 \\ 10 & -1 \end{vmatrix}$   
 $= -13$

$D_y = \begin{vmatrix} 5 & -1 \\ 2 & 10 \end{vmatrix}$   
 $= 52$

$(1, -4)$

**Chapter 4:**

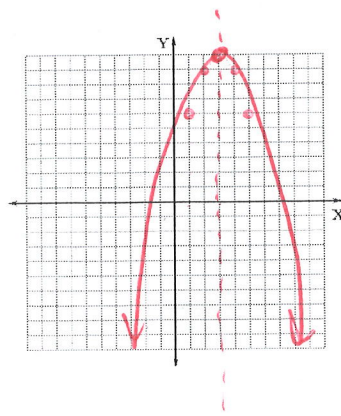
(4.1) Graph the Quadratic given the equation in Standard Form. Identify the vertex and two additional points. *Include work!*

1.  $y = -x^2 + 6x + 1$

$-\frac{6}{2(-1)} = 3$

$(3, 10)$

$\begin{array}{c|c} x & y \\ \hline 1 & 6 \\ 2 & 9 \end{array}$

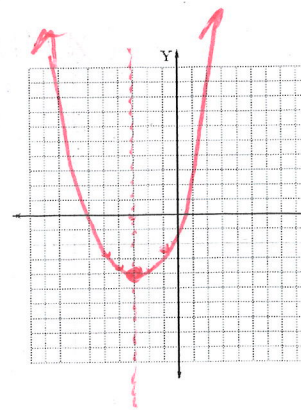


2.  $y = \frac{1}{3}x^2 + 2x - 1$

$x = \frac{-2}{2(\frac{1}{3})} = \frac{-2}{\frac{2}{3}} = -3$

$(-3, -4)$

$\begin{array}{c|c} x & y \\ \hline -1 & -2.66 \\ -2 & -3.66 \end{array}$

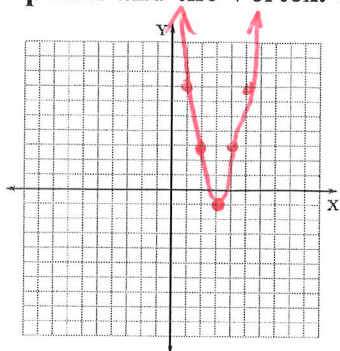


(4.2) Graph Quadratic given the equation in Vertex Form OR in Intercept Form. Identify the appropriate two additional points and the Vertex. *Include work!*

3.  $y = 2(x-3)^2 - 1$

$V: 3, -1$

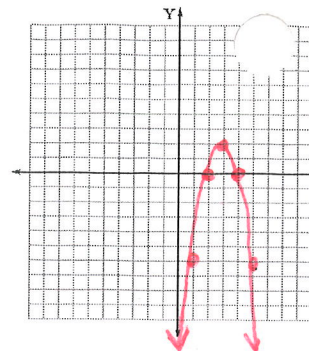
x	y
1	7
2	3



4.  $y = -2(x-4)(x-2)$

$x = 4, 2$

x	y
3	2
5	-6



(4.3 & 4.4) Factor the expression completely. *Include work!*

5.  $x^2 + 4x - 32$

$(x+8)(x-4)$

6.  $2x^2 + 11x + 15$

$(2x+5)(x+3)$

7.  $x^2 - 81$

$(x-9)(x+9)$

8.  $-12x^2 - 15x + 18$

$-3(4x^2 + 5x - 6)$   
 $-3(4x-3)(x+2)$

9.  $2x^3 - 5x^2 + 6x - 15$

	$2x$	$-5$
$x^2$	$2x^3$	$-5x^2$
$3$	$6x$	$-15$

$(2x-5)(x^2+3)$

(4.3 & 4.4) Solve the quadratic by Factoring. *Include work!*

10.  $x^2 + 13x + 36 = 0$

$(x+9)(x+4) = 0$

$x = -9, -4$

11.  $3x^2 + 5x - 28 = 0$

$(3x-7)(x+4) = 0$

$x = 7/3, -4$

12.  $x^2 + 14 = 9x$

$x^2 - 9x + 14 = 0$

$(x-7)(x-2) = 0$

$x = 7, 2$

13.  $8x^2 = 6x - 1$

$8x^2 - 6x + 1 = 0$

$(4x-1)(2x-1) = 0$

$x = 1/4, 1/2$



(4.7) Solve by Completing the Square – Include all work!

14.  $x^2 - 10x + 32 = 8$

$$x^2 - 10x + 24 = 0$$

	$x$	$-5$	
$x$	$x^2$	$-5$	
$-5$	$-5$	$25$	$-1$

$$(x-5)^2 = 1$$

$$(x-5) = \pm 1$$

$$x = 6, \text{ or } 4$$

15.  $x^2 - 6x + 22 = 6$

$$x^2 - 6x + 16 = 0$$

	$x$	$-3$	
$x$	$x^2$	$-3x$	
$-3$	$-3x$	$9$	$5$

$$(x-3)^2 + 5 = 0$$

$$(x-3)^2 = -5$$

$$x-3 = \pm i\sqrt{5}$$

$$x = 3 \pm i\sqrt{5}$$

(4.8) Solve using the Quadratic Formula – include all work!

16.  $3x^2 - 4x - 4 = -9$

$$3x^2 - 4x + 5 = 0$$

$$x = \frac{4 \pm \sqrt{16 - 4(3)(5)}}{2(3)}$$

$$x = \frac{4 \pm \sqrt{-44}}{6} = \frac{4 \pm 2i\sqrt{11}}{6} = \boxed{\frac{2 \pm i\sqrt{11}}{3}}$$

17.  $x^2 + 10x - 6 = -2$

$$x^2 + 10x - 4 = 0$$

$$x = \frac{-10 \pm \sqrt{100 - 4(1)(-4)}}{2(1)}$$

$$x = \frac{-10 \pm \sqrt{116}}{2} = \frac{-10 \pm 2\sqrt{29}}{2}$$

$$x = -5 \pm \sqrt{29}$$

Chapter 5:

(5.3) Add, Subtract, and Multiply Polynomials

1.  $(6x^3 - 5x + 2) - (4x^4 - 6x + 5)$

$$-4x^4 + 6x^3 + x - 3$$

2.  $(x-1)(x^2 - 7x + 3)$

	$x^2$	$-7x$	$3$
$x$	$x^3$	$-7x^2$	$3x$
$-1$	$-x^2$	$+7x$	$-3$

$$x^3 - 8x^2 + 10x - 3$$

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

	$3x$	$-2$
$x$	$3x^2$	$6x$
$4$	$12x$	$-8$

$$3x^2 + 10x - 8$$

4.  $(6x-1)^2$

	$6x$	$-1$
$6x$	$36x^2$	$6x$
$-1$	$-6x$	$1$

$$36x^2 - 12x + 1$$

(5.4) Factor Polynomials completely

5.  $3x^7 - 27x^3$

$$3x^3(x^4 - 9)$$

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

6.  $y^3 + 6y^2 - 3y - 18$

	$y$	$6$
$y^2$	$y^3$	$6y^2$
$-3$	$-3y$	$-18$

7.  $x^3 + 27$

$u = x$   
 $v = 3$

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

$$(y+6)(y^2 - 3)$$

(5.5) Divide using polynomial long division.

8.  $(8x^2 + 34x - 1) \div (4x - 1) =$

$$\begin{array}{r} 2x + 9 + \frac{8}{4x-1} \\ 4x-1 \overline{) 8x^2 + 34x - 1} \\ \underline{-8x^2 - 2x} \phantom{-1} \\ 36x - 1 \\ \underline{-36x - 9} \\ 8 \end{array}$$

Divide using synthetic division.

9.  $(x^4 - 7x^2 + 9x - 10) \div (x - 2) =$

$$\begin{array}{r|rrrrrr} 2 & 1 & 0 & -7 & 9 & -10 \\ & & 2 & 4 & -6 & 6 \\ \hline & 1 & 2 & -3 & 3 & -4 \end{array}$$

$x^3 + 2x^2 - 3x + 3 + \frac{-4}{x-2}$

(5.5) Factor the function completely given one of its factors.

19.  $f(x) = x^3 - 10x^2 + 19x + 30$  if  $(x - 6)$  is a factor

$$\begin{array}{r|rrrr} 6 & 1 & -10 & 19 & 30 \\ & & 6 & -24 & -30 \\ \hline & 1 & -4 & -5 & X \\ & & & & x^2 - 4x - 5 \end{array}$$

$(x-6)(x-5)(x+1)$   
 $x = 6, 5, -1$

(5.6) For each function: a.) List the Possible Rational Zeros of the function, b.) Factor Completely, and c.) Find all Zeros (Real and Imaginary). *Include all work!*

20.  $f(x) = x^4 - 2x^3 - 3x^2 + 2x + 2$

a.)  $\pm 2, \pm 1$

b.)

$$\begin{array}{r|rrrrr} 1 & 1 & -2 & -3 & 2 & 2 \\ & & 1 & -1 & -4 & -2 \\ \hline -1 & 1 & -1 & -4 & -2 & X \\ & & -1 & 2 & 2 & \\ \hline & 1 & -2 & -2 & X & \end{array}$$

$$x = \frac{2 \pm \sqrt{4 - 4(1)(-2)}}{2(1)} = \frac{2 \pm \sqrt{12}}{2} = \frac{2 \pm 2\sqrt{3}}{2} \quad x^2 - 2x - 2$$

FACTORS:  $f(x) = (x+1)(x-1)(x^2 - 2x - 2)$

ZEROS:  $x = -1, 1, 1 \pm \sqrt{3}$

21.  $f(x) = 8x^3 - 6x^2 - 23x + 6$

a.)  $\pm 6, \pm 3, \pm 2, \pm 1, \pm \frac{3}{2}, \pm \frac{1}{2}, \pm \frac{3}{4}, \pm \frac{1}{4}, \pm \frac{3}{8}, \pm \frac{1}{8}$

b.)

FACTORS:  $f(x) = (3x+2)(4x-1)(x-2)$

ZEROS:  $x = -\frac{3}{2}, \frac{1}{4}, 2$

(5.8) Graph the Polynomial. For each problem: a.) Describe the end behavior of the Polynomial, b) Identify the Zeros, d.) Describe the beginning and ending behavior of the graph of the polynomial, e.) Make a Table of Values, and f.) Draw the Curve.

22.  $f(x) = (x + 2)(x - 1)^2(x - 3)$

a.) End Behavior

*(?)*

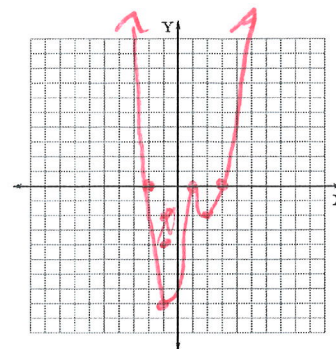
b.) Identify Zeros

*-2, 1, 3*

c.) Table

d.) Draw Curve

x	y
<i>-1</i>	<i>-16</i>
<i>2</i>	<i>-4</i>



(5.8) Graph the Polynomial. For each problem: a.) Describe the end behavior of the Polynomial, b) Identify the Zeros, d.) Describe the beginning and ending behavior of the graph of the polynomial, e.) Make a Table of Values, and f.) Draw the Curve.

18.  $f(x) = (x + 6)(x - 1)(x - 4)$

a.) End Behavior

*(?)*

b.) Identify Zeros

*-6, 1, 4*

c.) Table

d.) Draw Curve

x	y
<i>-4</i>	<i>80</i>
<i>-2</i>	<i>72</i>
<i>2</i>	<i>-16</i>
<i>3</i>	<i>-18</i>

