

# Assignment #5-2

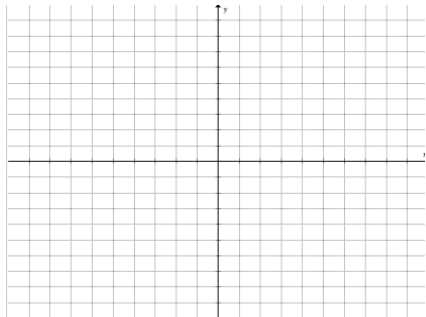
# Secondary 3 Honors

PreCalculus Book: Pg. 798 – 800 5, 8, 9, 12, 19, 20, 21, 22, 41, 48, 57, 60

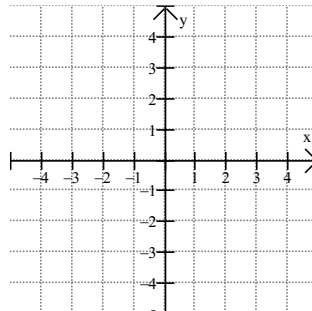
## Additional Problems:

1. Graph the following without using a calculator.

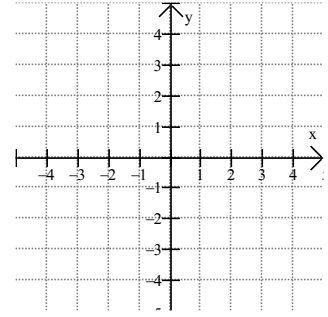
a.  $y = \frac{(x-3)^2(x+1)}{(x-3)(x+2)}$



b.  $y = -2|x+1| - 1$



c.  $y = x^3 + 3x^2 - 4x$



2. Find the Domain:

a.  $y = x^2 - 4x + 7$

b.  $y = \frac{x+2}{x^2 - 25}$

## ACT Review:

<p>1. Lines <math>p</math> and <math>n</math> lie in the standard <math>(x,y)</math> coordinate plane. An equation for line <math>p</math> is <math>y = 0.12x + 3,000</math>. The slope of line <math>n</math> is 0.1 greater than the slope of line <math>p</math>. What is the slope of line <math>n</math> ?</p> <p>F. 0.012 G. 0.02 H. 0.22 J. 1.2 K. 300</p>	<p>2. The expression <math>-8x^3(7x^6 - 3x^5)</math> is equivalent to:</p> <p>A. <math>-56x^9 + 24x^8</math> B. <math>-56x^9 - 24x^8</math> C. <math>-56x^{18} + 24x^{15}</math> D. <math>-56x^{18} - 24x^{15}</math> E. <math>-32x^4</math></p>
<p>3. <math>-3 -6 + 8  = ?</math></p> <p>F. -42 G. -6 H. -1 J. 6 K. 42</p>	<p>4. In right triangle <math>\triangle ACE</math> below, <math>\overline{BD}</math> is parallel to <math>\overline{AE}</math>, and <math>\overline{BD}</math> is perpendicular to <math>\overline{EC}</math> at <math>D</math>. The length of <math>\overline{AC}</math> is 20 feet, the length of <math>\overline{BD}</math> is 3 feet, and the length of <math>\overline{CD}</math> is 4 feet. What is the length, in feet, of <math>\overline{AE}</math> ?</p> <p>A. 10 B. 12 C. 15 D. 16 E. 17</p>