Assignment #5-1 Secondary 3 Honors

PreCalculus Book: Pg. 788 – 790 Do these **without** your calculator: 11, 12, 29 – 36, 51, 55, 58, 63, 71
Do these **with** your calculator: 6, 15, 41, 44

Additional Problems:

1. Perform the operations and simplify:

a. $\dfrac{3x-2}{x^2-4}-\dfrac{2x}{5(x+2)}$

b. $\dfrac{\dfrac{2}{x}-3}{\dfrac{x+1}{x^2}}$

2. Graph the following by finding the asymptotes, intercepts and holes.

a. $f(x)=\dfrac{x-2}{x^2-4x+4}$

b. $y=\dfrac{x^2+4x-5}{x+2}$

ACT Review:

1. A group of cells grows in number as described by the equation $y = 16(2)^t$, where t represents the number of days and y represents the number of cells. According to this formula, how many cells will be in the group at the end of the first 5 days?

A. 80
B. 160
C. 400
D. 512
E. 1,280

2. The length of a rectangle is 3 times the length of a smaller rectangle. The 2 rectangles have the same width. The area of the smaller rectangle is A square units. The area of the larger rectangle is kA square units. Which of the following is the value of k ?

F. $\frac{1}{9}$
G. $\frac{1}{3}$
H. 1
J. 3
K. 9

3. $(a + 2b + 3c) - (4a + 6b - 5c)$ is equivalent to:

A. $-4a - 8b - 2c$
B. $-4a - 4b + 8c$
C. $-3a + 8b - 2c$
D. $-3a - 4b - 2c$
E. $-3a - 4b + 8c$

4. In a basketball passing drill, 5 basketball players stand evenly spaced around a circle. The player with the ball (the passer) passes it to another player (the receiver). The receiver cannot be the player to the passer's immediate right or left and cannot be the player who last passed the ball. A designated player begins the drill as the first passer. This player will be the receiver for the first time on which pass of the ball?

A. 4th
B. 5th
C. 6th
D. 10th
E. 24th