REWIND AND REMEMBER #6 Acc (20 points).

1) Compare the solutions to the two problems below (show all the work for each problem):

Circle **A>B** or **B>A** or **A=B**

A. $\frac{6}{16} + \frac{3}{4} + 5\frac{1}{4}$

B. $10\frac{3}{4} \div 2\frac{1}{2}$

2) $\left|(-6)^3 + 100\right| - 4^0$

3) -4^4

4) If x = -2, y = -3

$$\frac{x^2 - 2xy}{2y}$$

5) The new Degas masterpiece purchased by the Museum of Fine Arts in Boston needs to be reframed. If the rectangular picture measures **_6x-3_** inches wide by **_8x-7_** inches high, what is the perimeter of the painting? **Give the simplified expression and then tell what the perimeter will be if x = 4 in.**

6) Indicate if the situation below represents a proportional or non-proportional relationship. Justify your response. Use the given information to fill in the missing information.

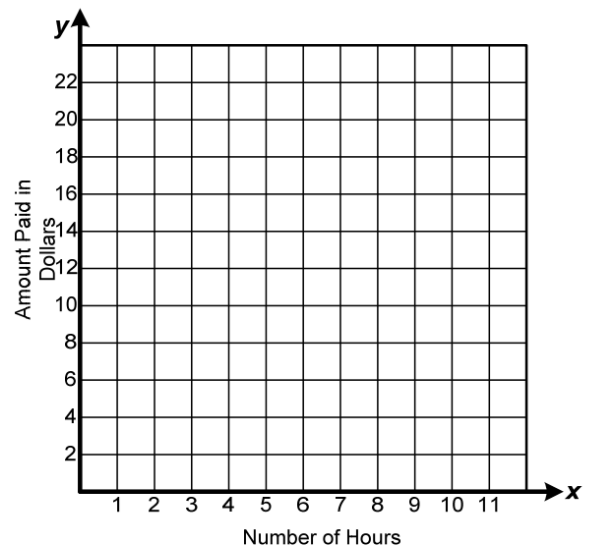Bill pays $4.00 an hour for parking fees and an additional charge of $10.00.

Table and Equation

Number of Hours	Process	Amount Paid ($)
_x_		_y_

Equation: _____

Proportional: _____

_____

Graph

7) Circle A, B, C or D. Find the next three numbers in the sequence.

5, 12, 26, …

   A. 52, 104, 208

   B. 33, 40, 47

   C. 47, 74, 111

   D. 54, 110, 222

8) Evaluate the expressions to learn some shark facts.

   a) length of a pygmy ribbontail catshark (inches) $24 - \sqrt{400} + \sqrt{9}$

   b) strength of the dusky shark (pounds of force) $2(4^3) + \sqrt{16}$

   c) migration distance of the blue shark (miles)
$$40^2 - 3(24 + 6^2) + 4\sqrt{1600} + 30$$

9) **Bryan is a photographer. He has a 5 in. by 7 in. photo that he wants to enlarge by 200%. What is the area of the new photo? Explain your answer.**

10)   Which expression is correctly simplified? Show your work!

A. $5cd - 3d^2 - (-cd) = 4cd - 3d^2$

B. $w(12 + w - 2) = w^2 + 10w$

C. $\dfrac{40a^3}{8a} = 5a$

D. $\dfrac{9a^2b}{81ab} = \dfrac{1}{9}$