Name_____ **Review Quiz** **Due: Monday, September 28**

please print clearly **MATH 153** **25 points**

Open book, open notes, however you must do your own work.
To receive credit, please show all *appropriate* work.
Use pencil, otherwise this quiz will not be graded!

(4) 1. Solve for x: $\dfrac{x+1}{2x-3} = 7$

(2) 2. Solve the inequality: $5 - 2x > 11$.
Express your answer in the form: $x >$? *or* $x <$? .

(4) 3. Write each of the following expressions using exponents.
E.g., $\sqrt{x} = x^{1/2}$.

(a) $\sqrt[3]{x} =$

(b) Use only *one* exponent : $\sqrt{5}\sqrt{2} =$

(c) Use only *positive* exponents : $\dfrac{x^5}{x^2 y^{-2}} =$

(d) Use only *one rational* exponent: $x\left(x^{2/3}\right)^2 =$

(4) 4. Simplify the algebraic expression: $\frac{(x+h)^2 - 2(x+h) - (x^2 - 2x)}{h}$, $h \neq 0$.

Remember to use the equal sign, = , as you simplify.

(3) 5. Solve the equation: $x^2 - 3x = 10$.

(3) 6. Consider the following equation: $\frac{x(x+1)}{x(x-2)} = 0$

Please circle T (True) or F (False).

T F $x = 0$ is a solution.
T F $x = -1$ is a solution.
T F $x = 2$ is a solution.

(5) 7. Graph the line, $2x + 5y = 10$, and find its slope m.
Be sure to clearly label the x and y intercepts and use a ruler to draw the x and y axes and this line.
The slope $m =$.