Math 3 Act. #27

* DIVIDE USING SYNTHETIC DIVISION.

[1] $(x^3 + 3x^2 - 28x - 62) \div (x + 6)$

[2] $(x^4 - 2x^3 - 52x^2 + 36x - 28) \div (x - 8)$

[3] $(m^4 - 8m^3 + 8m - 69) \div (m - 8)$

[4] $(9x^3 - 73x^2 + 71x - 10) \div (x - 7)$

[5] $(b^3 + 4b^2 - 6b + 2) \div (b - 1)$

[6] $(4k^4 + 32k^3 - 45k^2 - 87k - 64) \div (k + 9)$

[7] $(-3a^3 + a^4 - 47a^2 - 21 + 37a) \div (a + 6)$

Write an equation for the following given zeros:

[8] $x = 8,\ x = 3$

[9] $x = 2,\ x = 4,\ x = -3$

[10] $x = 6,\ x = 2,\ x = -1$

[11] $x = -2,\ x = 3,\ x = 4$

[12] $x = \frac{3}{3},\ x = 7$

[13] $x = 5,\ x = 4,\ x = 1$

[14] $x = 3,\ x = -8,\ x = \frac{1}{2}$

[15] $x = \frac{5}{1},\ x = 2,\ x = -2$

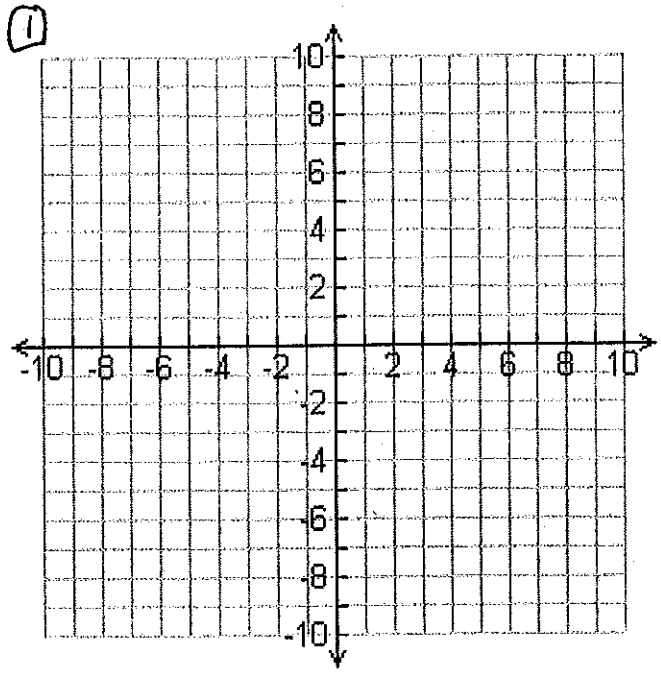
AFM

Piecewise Functions
ACT # 37

NAME _____

$$f(x)=\begin{cases}-x-8, 0<x\le 3\\ -x^2+7, -2\le x\le 0\\ |x|, x<-2\end{cases}$$

(1)



(1.) Graph the function.

(2) What is the Domain?

(3) Evaluate $f(0)$

(4) Evaluate $f(2)$

(5) Evaluate $f(-3)$

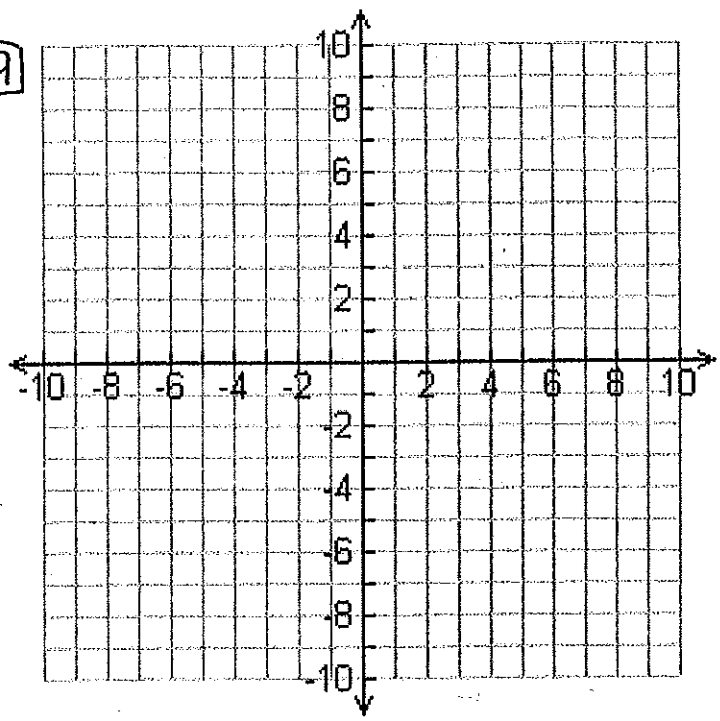
(6) Evaluate $f(-10)$

(7) Evaluate $f(-1)$

(8) Evaluate $f(3)$

$$f(x)=\begin{cases}x^2-1 & x\le 0\\ 2x-1 & 0<x\le 5\\ 3 & x>5\end{cases}$$

(9)



(9) Graph the function.

(10) What is the Domain?

(11) Evaluate $f(4)$

(12) Evaluate $f(-7)$

(13) Evaluate $f(1)$

(14) Evaluate: $f(-4)$

(15) Evaluate: $f(10)$

(16) Evaluate: $f(20)$