Alg2Trig Warm Up Chap 2 Day 4

What polynomial must be added to $x^2 - 2x + 6$ so that the sum is $3x^2 + 7x$?

A. $4x^2 + 5x + 6$
B. $3x^2 + 9x + 6$
C. $3x^2 + 9x - 6$
D. $2x^2 + 9x - 6$
E. $2x^2 - 5x + 6$

For the function $h(x) = 4x^2 - 5x$, what is the value of $h(-3)$?

A. -93
B. -9
C. 21
D. 51
E. 159

$4(-3)^2 - 5(-3)$
$4(9) + 15$

***6th & 8th Block Pictures ~~and vision test~~ 15 min into block.

***7th Block Pictures and vision test at 1:15.

Summer HW quiz in 10 minutes

Homework-> even answers

pg.93
#24) x-int:4, y-int:-4
28) x-int:5, y-int:-4
44) graph
46) graph

pg. 101
#10) y=-3x+8
18) skip
22) y=3x+2
42) 3x+2y=-2
44) 2x-y =-5

Agenda

-Turn in take home DLT

-Check HW-

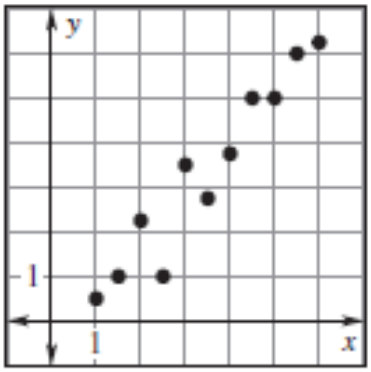
-Summer Homework Quiz

-Need any help with line of best fit in the graphing calculator?

-DLT-Next class

-Piecewise lesson-you will need graph paper

Algebra 2 Trig Daily Learning Target Quiz
Best-Fitting Lines Day 5

1.) Describe what it means to be a line of best fit.	2.) Find the line of best fit. 
3.) What is the correlation coefficient for this graph?	4.) Write a correlation coefficient when one variable increases and the other is decreasing?

ACT DLT EXTRA CREDIT DAY 5

What is the y-intercept of the line determined by the equation $2x + 3y + 4 = 0$?

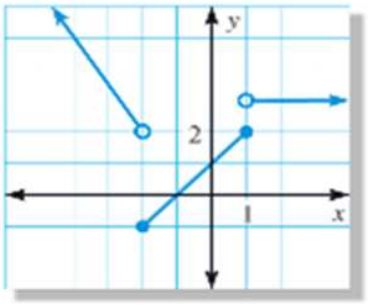
F. -4
G. -2
H. $-\frac{4}{3}$
J. $\frac{4}{3}$
K. 4

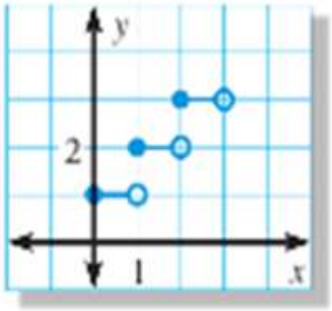
Chapter 2

2.7 Piecewise Functions

Open your books to page 130

Piecewise Functions





Examples

1.) Evaluate the piecewise function at the given values of x.

$$f(x)=\begin{cases}2x+2 & \text{if } x<0\\ -x^2 & \text{if } x\geq 0\end{cases}$$

$x=-1,\ 0,\ 1$

$x=-1$

$2(-1)+2$

$-2+2$

0

$x=0$

$-(0)^2$

0

$x=1$

$-1(1)^2$

-1

Examples

TOYO

2.) Evaluate the piecewise function at the given values of x.

$$f(x)=\begin{cases} x+3 \ if \ x<2 \\ x-3 \ if \ x\geq 2 \end{cases}$$

$x = 1, 2, 3$

X=1

1+3

4

X=2

2-3

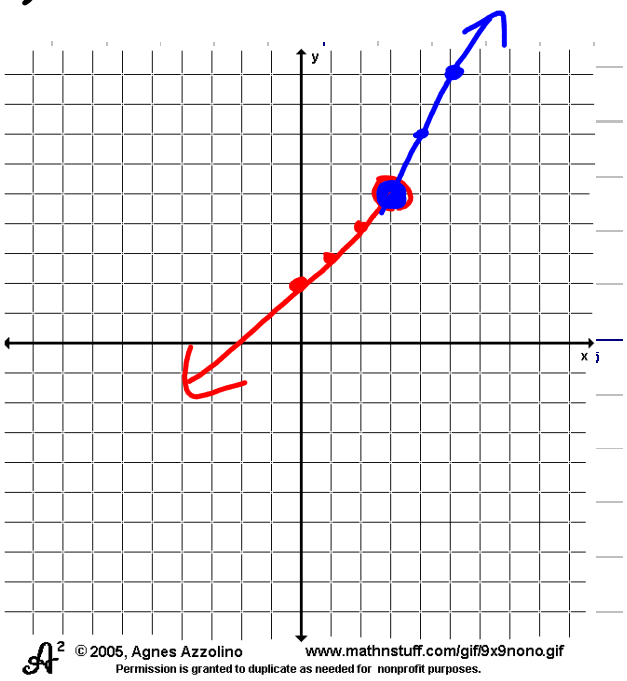
-1

X=3

3-3

0

3.)

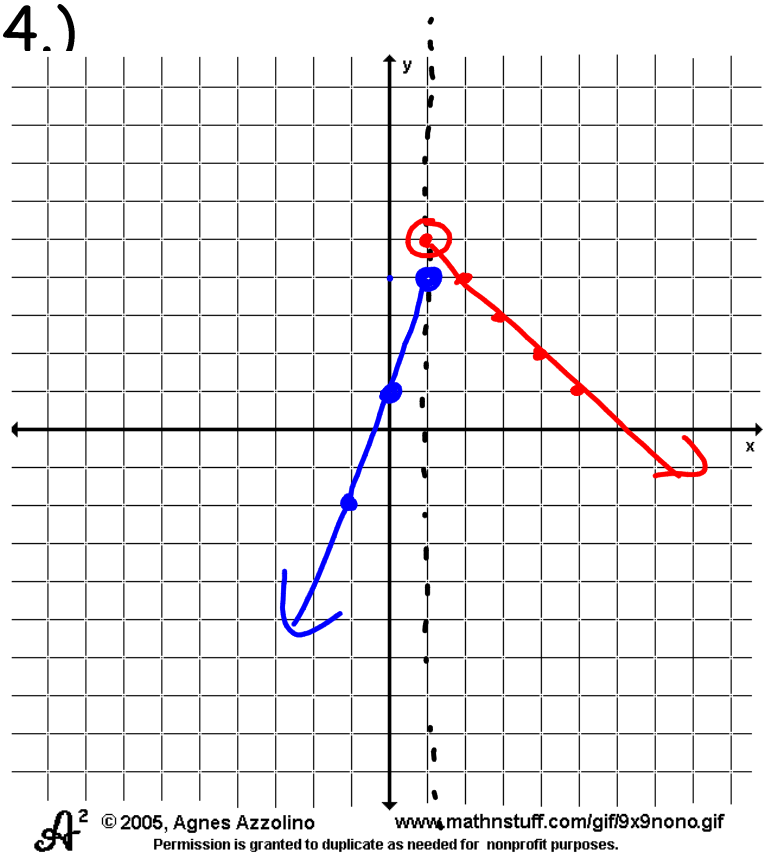


Examples

$$f(x)=\begin{cases} x+2 \text{ if } x<3 \\ 2x-1 \text{ if } x\geq 3 \end{cases}$$

Let's Draw!!!

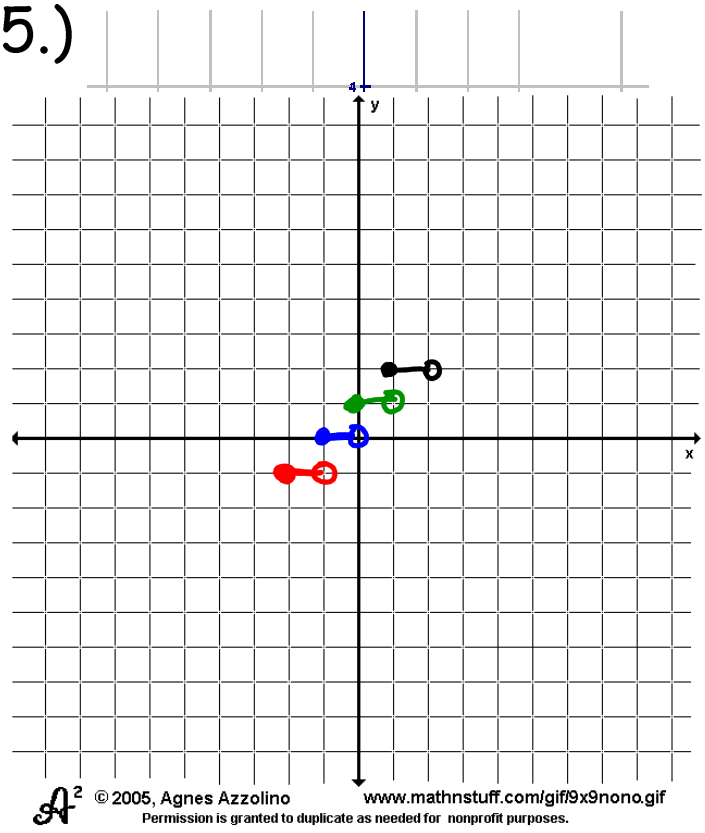
4.)



Examples

$$f(x) = \begin{cases} 3x+1 \text{ if } x \leq 1 \\ -x+6 \text{ if } x > 1 \end{cases}$$

5.)

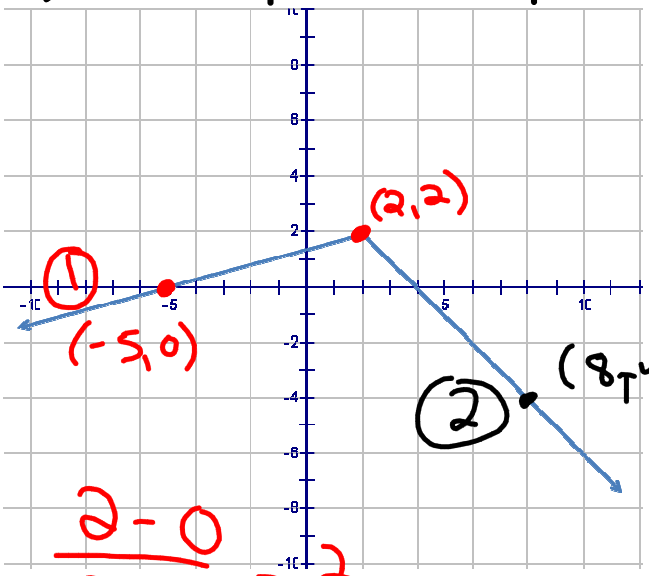


Examples

$$f(x)=\begin{cases} -1 \text{ if } -2 \le x < -1 \\ 0 \text{ if } -1 \le x < 0 \\ 1 \text{ if } 0 \le x < 1 \\ 2 \text{ if } 1 \le x < 2 \end{cases}$$

$y = -1$

6.)Find the piecewise equation!



$\frac{2-0}{2--5} = \frac{2}{7}$

$y-2 = \frac{2}{7}(x-2)$

$y-2 = \frac{2}{7}x - \frac{4}{7} + \frac{14}{7}$

$+2 \quad +2$

$y = \frac{2}{7}x + \frac{10}{7}$

Examples

$$f(x) = \begin{cases} \frac{2}{7}x + \frac{10}{7} & x \le 2 \\ -x+4 & x > 2 \end{cases}$$

This is even better!!!!

$\frac{-4-2}{-4-2} = \frac{-6}{6} = -1$

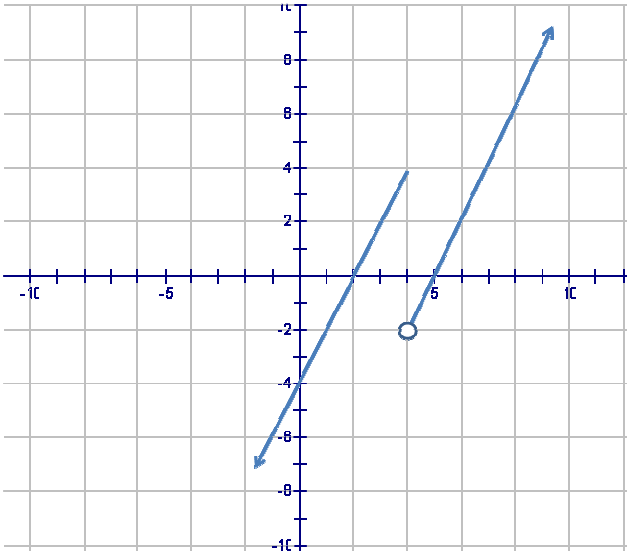
$y--4 = -1(x-8)$

$y+4 = -x+8$

$y = -x+4$ $\frac{12}{3}$

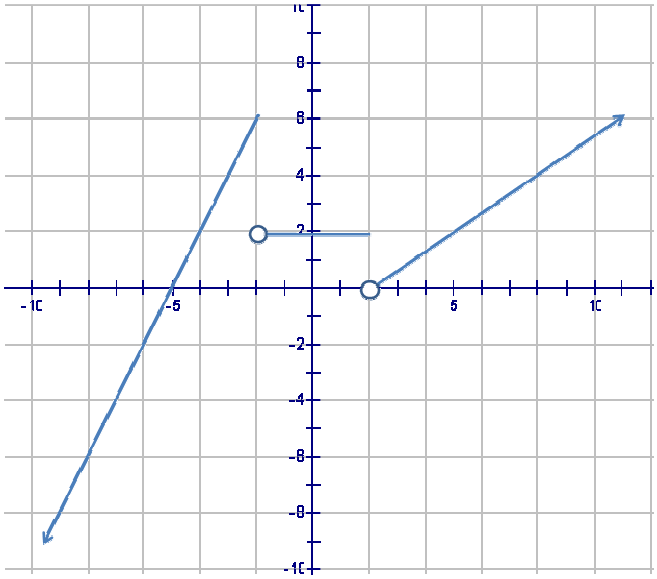
Examples

7.)Find the piecewise equation!



Examples

8.)Find the piecewise equation!



Are you getting it???

Homework:

Page 131/1-7, 8b

WS