

July 14, 2015

$$\frac{f(x+h) - f(x)}{h} \text{ for } f(x) = \frac{-2x}{3x-2}$$

a)  $f(x+h) = \frac{-2(x+h)}{3(x+h)-2}$

b)  $f(x) = \frac{-2x}{3x-2}$

c)  $\frac{\frac{-2(x+h)}{3(x+h)-2} - \frac{-2x}{3x-2}}{h}$

$$\frac{\frac{(2x+2h)(3x-2) - 2x(3x+3h-2)}{(3x+3h-2)(3x-2)}}{h}$$

$$\frac{\frac{6x^2 - 4x + 6xh - 4h - 6x^2 - 6xh + 4x}{(3x+3h-2)(3x-2)}}{h}$$

$$\frac{\frac{-4h}{(3x+3h-2)(3x-2)}}{h}$$

$$-\frac{4}{(3x+3h-2)(3x-2)}$$

Jul 14-2:08 PM

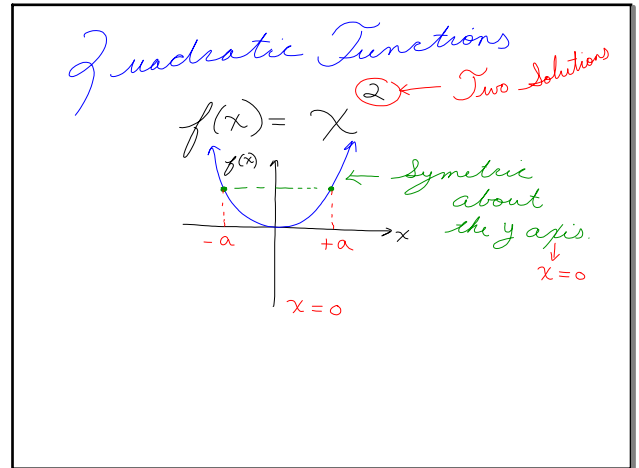
Exam #2 - Thursday

- 9.1 — 9.4
- Exam #1

Jul 14-2:17 PM

- ① Radical Functions
- ② Linear & General Functions
- ③ Quadratic Functions

Jul 14-2:21 PM



Jul 14-2:23 PM

Solving Quadratic Equations

① Factor

$$x^2 + 7x + 12 = 0$$

$$(x+4)(x+3) = 0$$

\* Use Zero Factor Theorem

$$ab = 0$$

- ①  $a = 0$
- ②  $b = 0$
- ③  $a \text{ and } b = 0$

①  $x+4 = 0$   
 $x = -4$

②  $x+3 = 0$   
 $x = -3$

Check

|                           |                           |
|---------------------------|---------------------------|
| $x = -4$                  | $x = -3$                  |
| $(-4)^2 + 7(-4) + 12 = 0$ | $(-3)^2 + 7(-3) + 12 = 0$ |
| $16 - 28 + 12 = 0$        | $9 - 21 + 12 = 0$         |
| $-12 + 12 = 0$            | $-12 + 12 = 0$            |
| $0 = 0$                   | $0 = 0$                   |

Jul 14-2:26 PM

- ② The Square Root Property
- ③ Completing the Square
- ④ The Quadratic Formula

Jul 14-2:33 PM

