

September 28, 2015

Exam # 1 $\frac{56}{56} = 100$

* 4 pts per question

#1 $\rightarrow -4$

-2 #2

+1 #3

-18

$56 - 18 = 38$

$\frac{38}{56} = 68$

86!

Sep 28-1:01 PM

#3) $8x - 6 = 8x - 48$

$a(b+c) = ab + ac$

$2 \cdot 4x - 2 \cdot 3$

$2(4x - 3)$

Sep 28-1:17 PM

#6)

$1 - 5 \cdot 2 - 2(3 - |-12 + 3|) - (-2)$

$5^2 - 2(3 - |-9|) + 2$

$25 - 2(3 - 9) + 2$

$25 - 2(-6) + 2$

$25 + 12 + 2$

$37 + 2$

39

Sep 28-1:28 PM

$-6^2 = (-1) \cdot 6^2$

$= (-1) \cdot 6 \cdot 6$

$= (-6) \cdot 6$

$= -36$

Sep 28-1:40 PM

$-|-50| \quad -(-5)$

$(-1) \cdot 50 \quad (-1) \cdot (-5)$

$-50 < 5$

Sep 28-1:44 PM

#12)

$(12 - 3^3) - 12 \cdot 5 \quad ? \quad -(100 \div 5^2)^2 - 72 \div (-6)^2$

$(12 - 27) - 12 \cdot 5 \quad -(100 \div 25)^2 - 72 \div (-6)^2$

$(-15) - 12 \cdot 5 \quad -(4)^2 - 76 \div 36$

$-15 - 60 \quad -16 - 2$

$-75 < -18$

Sep 28-1:46 PM

$$N = \{1, 2, 3, \dots\}$$

$$W = \{0, 1, 2, \dots\}$$

$$I = \{\dots, -2, -1, 0, 1, 2, \dots\}$$

Sep 28-1:49 PM

5.1 Junctions

- * Relation: a set of ordered pairs
 $(a, b), (-2, 5), (\text{Athens, GA})$
 (x, y)
- * Domain: the set of the 1st elements of the ordered pairs
 $D = \{2, 3, 4\}$
- * Range: the set of the 2nd elements of the ordered pairs
 $R = \{5, -4, 8\}$

Sep 28-1:28 PM

Relations
 ↳ Junctions

- * Assigns to each element of the domain exactly one element from the range.

(a, b)
 1st 2nd

Sep 28-2:05 PM

Junction machine

① Input $5 \rightarrow$ $0 \rightarrow$

f
 ② Rule or Software
 $3x$

③ Output 15 0

- * $x \rightarrow$
- * Horizontal Position $(5, 15)$ $(0, 0)$
- * Domain (x, y)
- * Independent Variable
- * y , or $f(x)$
- * Vertical Position
- * Range
- * Dependent variable

Sep 28-2:10 PM

Notation

Rule: $2x + 4$

2 \rightarrow 8
 -3 \rightarrow -2
 0 \rightarrow 4
 7 \rightarrow 18
 Mapping

f maps in to out
 $f: 2 \rightarrow 8$

① $f: x \rightarrow 2x + 4$

② $f(x) = 2x + 4$
 Rule
 Input
 f of x equals $2x + 4$

$f(-2) = 2(-2) + 4$
 $= -4 + 4$
 $= 0 \rightarrow$ output

Sep 28-2:22 PM

$$f(x) = 2x^2 - 3x + 2$$

$$f(3) = 2(3)^2 - 3(3) + 2$$

$$= 2(9) - 3(3) + 2$$

$$= 18 - 9 + 2$$

$$= 9 + 2$$

$$= 11 \quad (3, 11)$$

$$f(-5) = 2(-5)^2 - 3(-5) + 2$$

$$= 2(25) + 15 + 2$$

$$= 50 + 15 + 2$$

$$= 65 + 2$$

$$= 67 \quad (-5, 67)$$

$$f(a) = 2(a)^2 - 3(a) + 2$$

$$= 2a^2 - 3a + 2$$

Unlike Terms

Sep 28-2:31 PM

For Wed
* Read & Understand
5.1
* Do #1 - #45 m3

Sep 28-2:38 PM