

M8 6.6 Creating a Table of Values

Name _____

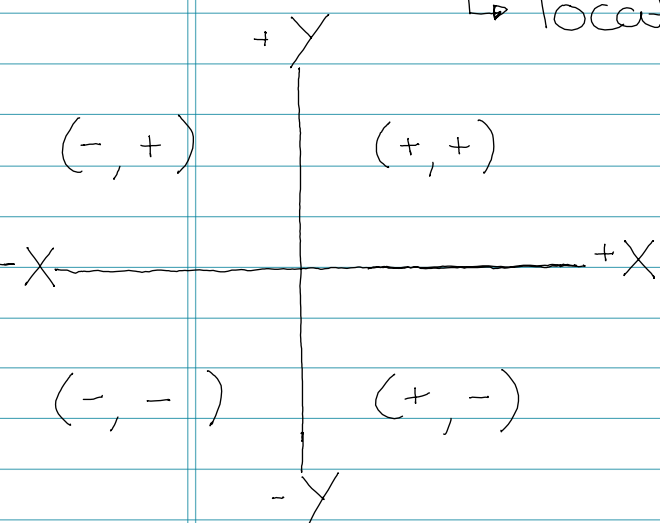
Review

Coordinates / Ordered Pairs

Blk _____

↳ location of a point on a graph/grid

↳ ALWAYS written (x, y)
(x first, then y)



X: ↔ L/R (horizontal)

Y: ↓ up/down (vertical)

[Z: ↗ in/out] comes later...

New

Relation: two data sets that R associated

Set: a collection of objects (often R numbers)

Table of Values: a table w/ values for 2 variables (x, y)

Relation: $3x + 2 = y$

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X domain input independent	Y range output dependent
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+1 0	2 +3	when $x=0$, y is 2	$3(0) + 2 = y$
+1 1	5 +3	when $x=1$, y is 5	$3(1) + 2 = y$
+1 2	8 +3	when $x=2$, y is 8	$3(2) + 2 = y$
+1 3	11	when $x=3$, y is 11	$3(3) + 2 = y$

Linear Relation: when the change in input (x) is constant (+1) (straight line) and the change in output (y) is constant (+3)

6.6 cont...

Ex 1 Pizza costs \$11 plus \$2 for each topping.

$n = \# \text{ of topping}$
 $C = \text{cost}$

* cost (c) depends on toppings (n)
 dependant Y independent X

Write a Table of Values (T.O.V.) for the relation
 $C = 11 + 2n$

1) write the relation and set-up table

$$C = 11 + 2n$$

x	y
n	C
0	11 $11 + 2(0) = 11$
1	$11 + 2(1) = 13$
2	$11 + 2(2) = 15$
3	$11 + 2(3) = 17$

Ex 2 The Equation of a Linear Relation is $y = -5x - 3$. Some ordered pairs in the relation R:

$(0, -3), (1, -8), (2, -13), (3, ?), (4, -23), (?, -28)$

Find the missing values

a) T.O.V $y = -5x - 3$

b) calculate using Algebra
 $(3, ?)$ you know x \therefore

$$y = -5(3) - 3$$

$$y = -15 - 3$$

$$y = -18$$

$(3, -18)$

-18 $(?, -28)$ you know y \therefore

$$-28 = -5x - 3$$

$$+3 \quad +3$$

$$-25 = -5x$$

$$\div -5 \quad \div -5$$

$$5 = x$$

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$(3, -18)$

$(5, -28)$

HW

a
4, 5, 6

b
8, 9, 10

c
11, 12, 13