Warm Up Grade 8

Oct. 17, 2017

1) Find the missing value for the ordered pairs of y = 6x+ 5

(show work)

a) (-5, ___) x, y

$y = 6x + 5$

$y = 6(-5) + 5$

$= -30 + 5$

$y = -25$

$(-5, -25)$

b) (___, 59) x, y

$y = 6x + 5$

$59 = 6x + 5$

$59 - 5 = 6x + 5 - 5$

$54 = 6x$

$\frac{54}{6} = \frac{6x}{6}$

$9 = x$

x, y

(9, 59)

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4(b,c), #5(a,c), #6, #7, #8(b), #11, #12(Like a test question)

b) $y = x + 3$

Show work

$x + 3$

Input x	Output
1	4
2	5
3	6
4	7
5	8

$x=1$ $(1)+3$

$x=2$ $(2)+3$

$x=3$ $(3)+3$

c) $y = 2x$

$2 \cdot (x)$

Input x	Output y
1	2
2	4
3	6
4	8
5	10

$x=1$ $2(1)$

$x=2$ $2(2)$

$x=3$ $2(3)$

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4(b,c), #5(a,c), #6, #7,

5. a) $y = 2x + 1$

Input	Output
x	y
1	3
2	5
3	7
4	9
5	11

$x = 1$
$y = 2x + 1$
$= 2(1) + 1$
$= 2 + 1$
$= 3$

$x = 2$
$y = 2x + 1$
$= 2(2) + 1$
$= 4 + 1$
$= 5$

$x = 3$
$y = 2x + 1$
$= 2(3) + 1$
$= 6 + 1$
$= 7$

c) $y = -2x + 1$

Input	Output
x	y
1	-1
2	-3
3	-5
4	-7
5	-9

$x = 1$
$-2(1) + 1$
$-2 + 1$
-1

$x = 2$
$-2(2) + 1$
$-4 + 1$
-3

$x = 3$
$-2(3) + 1$
$-6 + 1$
-5

b. ordered pairs

Input x	Output y
0	-7
1	2
2	11
3	20
4	29
5	38

+9

$y = 9x - 7$

$x = 2$: $9(2) - 7$, $9 \times 2 - 7$, $18 - 7$, 11

$x = 4$: $9 \times 4 - 7$, $36 - 7$, 29

$y = 9(x) - 7$

$38 = 9x - 7$ or see if pattern continue

$38 + 7 = 9x - 7 + 7$

$45 = 9x$

$\frac{45}{9} = \frac{9x}{9}$

$5 = x$

$9 \times 5 - 7$, $45 - 7$, 38

7. $w = 7h$

$y = 7x$

Input h	Output 7h
1	7
2	14
3	21
4	28
5	35

$h = 1$, $7(1) = 7$

$h = 2$, $7(2) = 14$

$h = 3$, $7(3) = 21$

Input	Output

b) $7h = 105$

$\frac{7h}{7} = \frac{105}{7}$

$h = 15$

c) $h = 24$

$w = 7h$

$= 7 \times 24$

$= \$168$

8a) $y = x + 2$

Input x	Output y
-3	-1
-2	0
-1	1
0	2
1	3
2	4
3	5

Input	Output

b) $y = x - 3$

Input x	Output y
-3	-6
-2	-5
-1	-4
0	-3
1	-2
2	-1
3	0

c) $y = x + 4$

Input x	Output y
-3	1
-2	2
-1	3
0	4
1	5
2	6
3	7

Cost of catering a banquet supper for the local seniors is $8 per plate and flat fee of $100. Calculate the following when given the equation,

$$C = 8p + 100$$

a) How much does it cost if 50 people decide to go? (SHOW YOUR WORK)

$p = 50$

$C = 8p + 100$

$= 8(50) + 100$

$= 400 + 100$

$= \$500$

It will cost $500 if 50 people attend the banquet

b) If the company gets paid $284, then how many people attended ? (SHOW YOUR WORK)

$C = \$284$

$C = 8p + 100$

$284 = 8p + 100$

$284 - 100 = 8p + 100 - 100$

$184 = 8p$

$\frac{184}{8} = \frac{8p}{8}$

$23 = p$

If the company gets paid $284 the 23 people attended.

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5b, #[illegible], #9(a,b,c), , #10, #11, #12(Like a test question)

a b — a b c

$m = 100 - 2n$
$y = 100 - 2x$ OR $-2x + 100$

12a)

(n) x	m y
1	98
2	
3	
4	
5	

n = 1
100 − 2(n)
100 − 2(1)
100 − 2
98

n = 2

n = 3