

### 3-1: Ordered Pairs Notes

The table shows the number of cartons and the number of eggs that are in each carton.

Number of Cartons	Number of Eggs
1	12
2	24
3	36
4	48
5	60
6	72

- 1) How many eggs are there in one carton?
- 2) How many eggs are there in 4 cartons?
- 3) If you had 36 eggs, how many cartons would that be?

You can show the relationship between the number of cartons and the number of eggs as an \_\_\_\_\_ . For example: \_\_\_\_\_ is the ordered pair which stands for 1 egg carton, 12 eggs. An \_\_\_\_\_ has two numbers, and they must be placed in the correct \_\_\_\_\_ .

- 4) Write the ordered pair for 3 eggs cartons.
- 5) Write the ordered pair for 5 eggs cartons.

**Write "true" or "false."**

- 6) The ordered pair for 6 egg cartons is (72, 6).
- 7) The ordered pair for 2 egg cartons is (2, 24).

**Write ordered pairs for the following.**

- 8) One deck of cards contains 52 cards.
- 9) Two packs of soda contain 12 cans.
- 10) Three packages of gum contain 15 pieces.

Name \_\_\_\_\_ Class \_\_\_\_\_

Ordered pairs can be used for variables too. We use the general form \_\_\_\_\_ to ordered variables (note: alphabetical order)!

**Determine whether each ordered pair is a solution of  $y = x + 6$ .**

1) (3, 8)

2) (5, 11)

3) (13, 7)

**Determine whether each ordered pair is a solution of  $y = 2x + 1$ .**

4) (0, 3)

5) (3, 6)

6) (5, 11)

**Complete the tables.**

7)  $y = x + 4$

x		y
-2		
-1		
0		
1		
2		

8)  $y = 3x$

x		y
-2		
-1		
0		
1		
2		

9)  $y = 4x - 1$

x		y
-2		
-1		
0		
1		
2		

10) To become a member at a gym, you must pay a start-up fee of \$100 plus \$25 each month. The equation that gives the total amount "t" spent on the gym is  $t = 100 + 25m$  where "m" is the number of months as a member. Write an ordered pair (m, t) for the total amount spent on the gym for someone that has been a member for:

a. 3 months?

b. 6 months?

c. A year?

11) A taxi charges \$2.50 flat fee plus \$0.30 per mile. Use the equation  $c = 2.50 + 0.30m$  where "c" is the cost of the ride and "m" is the number of miles to write an ordered pair (m, c) for a 23-mile taxi ride.