

Name: Key

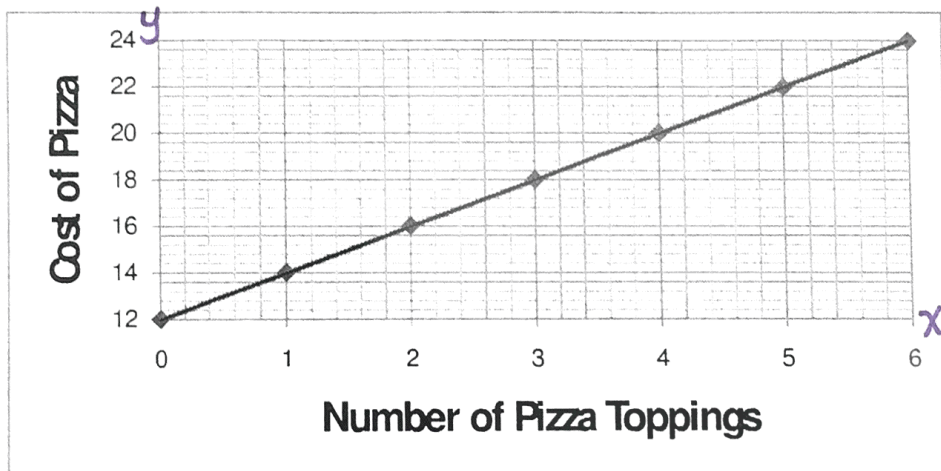
Date: _____

Complete the following table by writing possible independent or dependent variables.

Independent Variable	Dependent Variable
EXAMPLE: <i>Number of hours you study for a test</i>	<i>Your test score</i>
1. Number of gallons in your gas tank	1. <i>How many miles you can drive.</i>
2. <i>How well you can solve problems</i>	2. Your IQ (Intelligence Quotient)
3. The number of calories you eat each day	3. <i>Your weight</i>
4. <i>How much sleep you get.</i>	4. Your level of happiness

Answers can vary

Refer to the following graph for questions 5-7.



5. What is the independent variable? *Number of pizza toppings*

6. What is the dependent variable? *Cost of pizza*

7. How are the independent and dependent variables related? *(Be as precise as you can)*

The more toppings you get, the more expensive the pizza.

(They increase/decrease together)

You are given the following data on the relationship between John's test score and the number of hours he studies.

^x # of Hours John Studies	^y John's Test Score
0	75
.5	80
1	85
1.5	90
2	95
2.5	100

8. What are the independent and dependent variables?

^x
 ↓
 hours studied ^y
 ↓
 Test score

9. How are the independent and dependent variables related? (*Be as precise as you can*)

As John increases his study time by 30 minutes, his test score increases by 5 points.

You are given the following data on the relationship between the number of dinner guests at Mary's house and the amount of time she will need to prepare dinner.

Number of Guests	Meal Preparation Time (min)
3	25
4	33
5	41
6	49
7	57
8	65

10. What are the independent and dependent variables?

^x
 ↓
 # of guests ^y
 ↓
 Meal prep. time

11. How are the independent and dependent variables related? (*Be as precise as you can*)

Each additional guest adds 8 minutes to the meal preparation time.