

Recognizing Proportional Relationships

1

Select the correct answer from each drop-down menu.

Gino is buying wood screws at the corner hardware store. The table shows different numbers of bags of screws and their corresponding prices.

Bags of Screws	Price (\$)
2	10
4	20
7	35

According to the table, the relationship between the number of bags and the price is

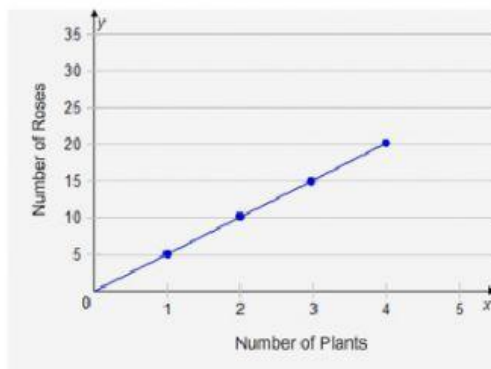
Drag Answer Here

Proportional

Not Proportional

2

Select the correct answer from each drop-down menu.



According to the graph, the relationship between the number of rose plants and the number of roses is

Drag Answer Here

Proportional

Not Proportional

Recognizing Proportional Relationships

3

Select the correct answer.

Which table shows a proportional relationship between x and y ?

☐ A.

x	y
2	4
3	6
4	9

☐ B.

x	y
3	4
9	16
15	20

☐ C.

x	y
4	12
5	15
6	18

☐ D.

x	y
1	4
2	8
3	15

Recognizing Proportional Relationships

4

Select the correct answer.

Which phrase best describes the graph of a proportional relationship?

- ☐ A. a straight line passing through the origin
- ☐ B. a straight line
- ☐ C. a curve
- ☐ D. not a straight line

Recognizing Proportional Relationships

5

Select all the correct answers.

The table shows how many shirts four garment factories made and how long it took to make them. The relationship between the number of shirts and the number of days required to make the shirts is proportional.

Factory	Number of Days	Number of Shirts
A	2	600
B	3	900
C	4	1,200
D	5	1,500

A fifth factory (factory E) can make shirts at the same rate as the first four factories. Which table(s) could represent the production rate of factory E?

☐

Factory	Number of Days	Number of Shirts
E	1	400

☐

Factory	Number of Days	Number of Shirts
E	1	300

☐

Factory	Number of Days	Number of Shirts
E	6	1,800

☐

Factory	Number of Days	Number of Shirts
E	6	2,400

Recognizing Proportional Relationships

6

Select the correct answer.

Which table shows a proportional relationship between a and b ?

☐ A.

a	b
3	9
4	12
5	20

☐ B.

a	b
20	25
24	30
32	40

☐ C.

a	b
4	12
5	15
6	24

☐ D.

a	b
3	4
6	9
12	16

Recognizing Proportional Relationships

7

Select the correct answer.

Mr. Finley's class visited a number of freshwater lakes to learn more about the crocodiles and alligators living in them. The class counted the number of species in each lake as shown in the table.

Lake	Crocodiles	Alligators
A	4	5
B	21	35
C	3	9
D	6	16
E	24	30

The relationship between the number of crocodiles and the number of alligators is not proportional across all lakes. Only two of the lakes have crocodiles and alligators in the same proportion. Which two lakes are they?

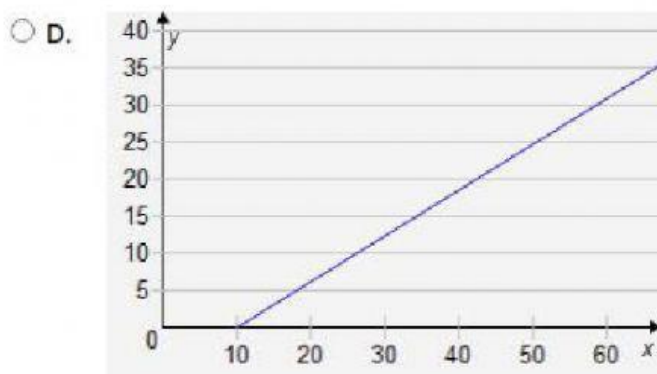
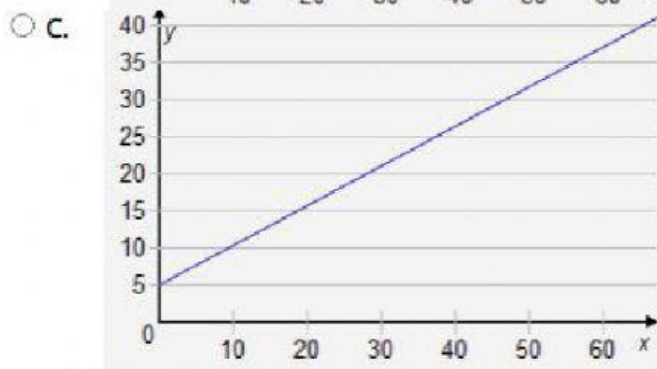
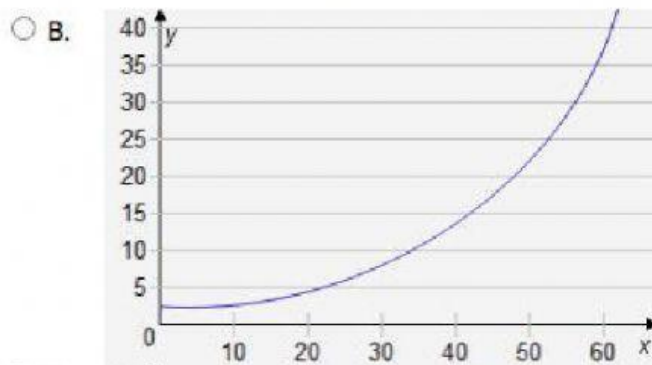
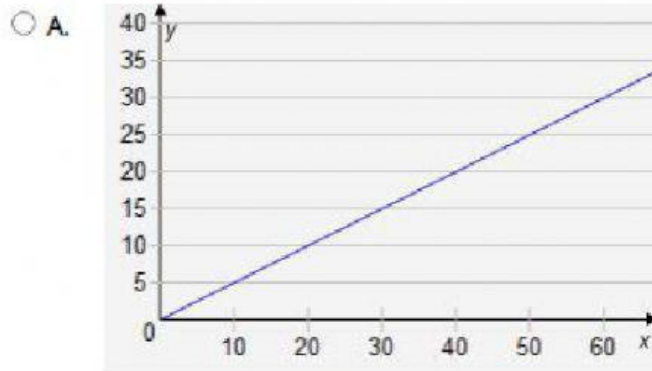
- ☐ A. lake A and lake B
- ☐ B. lake B and lake C
- ☐ C. lake A and lake E
- ☐ D. lake C and lake D

Recognizing Proportional Relationships

8

Select the correct answer.

Which graph represents a proportional relationship?



Recognizing Proportional Relationships

9

Select ALL the correct answers.

Sandy has four boxes filled with pink ribbons and yellow ribbons. The table shows the number of pink and yellow ribbons in each box.

Box Number	Pink Ribbons	Yellow Ribbons
1	4	5
2	16	20
3	12	15
4	36	45

A fifth box has pink and yellow ribbons in the same proportion as Sandy's first four boxes. Which tables could represent box number 5?

☐

Box Number	Pink Ribbons	Yellow Ribbons
5	32	45

☐

Box Number	Pink Ribbons	Yellow Ribbons
5	40	60

☐

Box Number	Pink Ribbons	Yellow Ribbons
5	24	30

☐

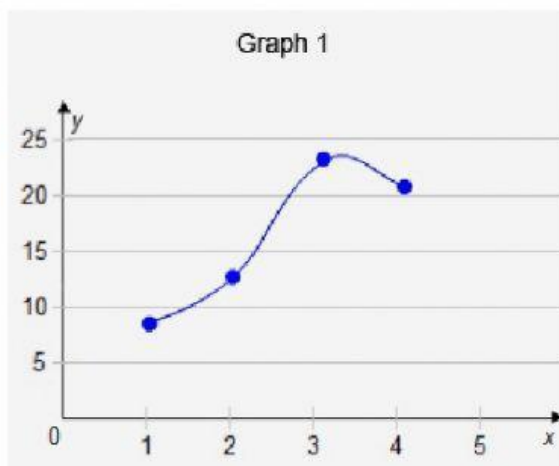
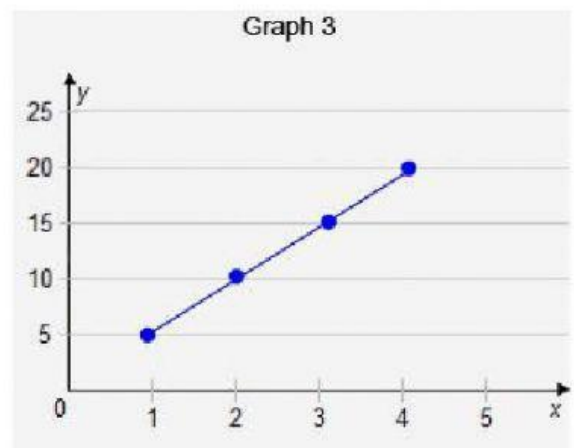
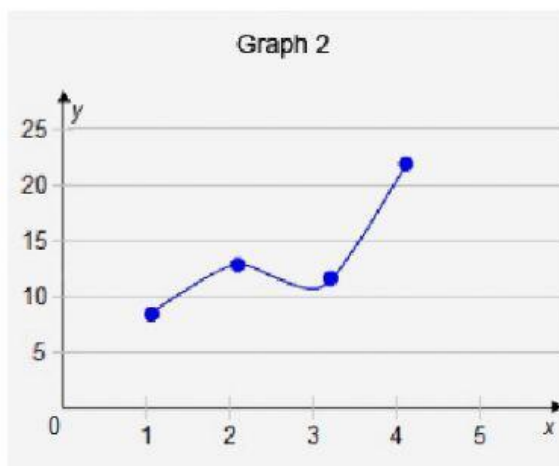
Box Number	Pink Ribbons	Yellow Ribbons
5	8	10

Recognizing Proportional Relationships

10

Select ALL the correct answers.

Which graphs show a proportional relationship?

☐☐☐☐