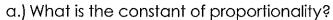
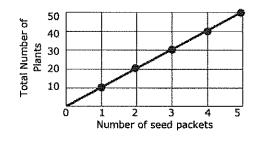
Practice 6.6 - Identify the Constant of Proportionality

Use the graphs to answer all the questions below.

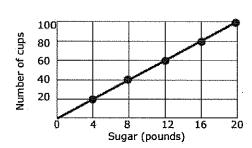
1.) The graph below represents the total number of plants and number of seed packets used.





b.) What does the point (2,20) represent?

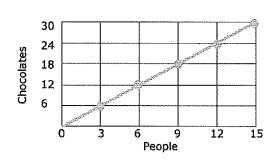
2.) The graph below represents the total number of cups of coffee and the total amount of sugar required to make the coffee.



a.) What is the constant of proportionality?

b.) What does the point (12,60) represent?

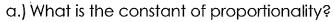
3.) The graph below represents the chocolate consumed by people.

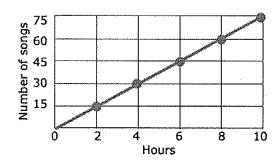


a.) What is the constant of proportionality?

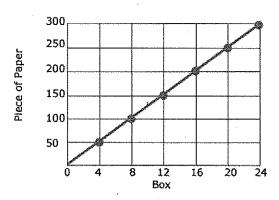
b.) What does the point (9,18) represent?

4.) The graph below represents the number of songs played on a radio station.



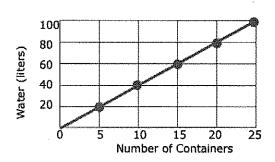


- b.) What does the point (8,60) represent?
- 5.) The graph below represents the number of pieces of paper that are found in boxes.



- a.) What is the constant of proportionality?
- b.) What does the point (8,100) represent?

6.) The graph below represents the number of containers and liters of water contained in the containers.



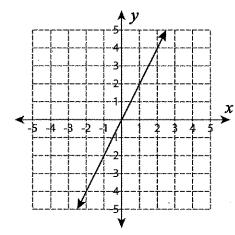
- a.) What is the constant of proportionality?
- b.) What does the point (25,100) represent?

Constant of Proportionality - Graph

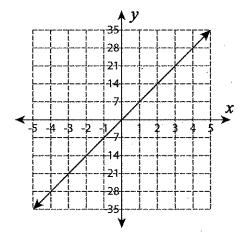
Sheet 1

Identify the constant of proportionality(k) for each graph and write the proportional relationship (y = kx).

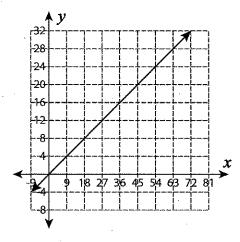
1)



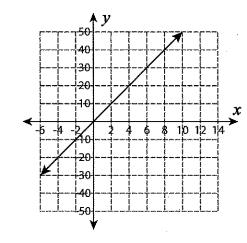
2)



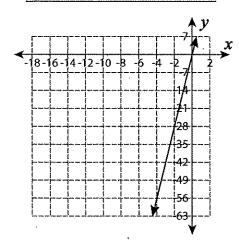
3)



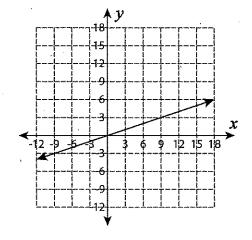
4)



5)



6)



6.7 Homework

Determine the constant of proportionality(k) for each table and write the relationship between x and y.

1.

| х | 9 | 4 | 2 | 11 |
|---|----|----|----|----|
| у | 63 | 28 | 14 | 77 |

2.

| х | 2 | 3 | 8 | 10 |
|---|---|----|----|----|
| у | 8 | 12 | 32 | 40 |

3.

| х | 4 | 7 | 9 | 14 |
|---|----|----|----|----|
| у | 12 | 21 | 27 | 42 |

4.

| x | 72 | 45 | 36 | 18 |
|---|----|----|----|----|
| y | 32 | 20 | 16 | 8 |

5.

| Number of pie | Number of fruit |
|---------------|-----------------|
| 2 | 10 |
| 3 | 15 |
| 4 | 24 |
| 5 | 25 |

6.

| Distance (m) | Time (In minutes) |
|--------------|-------------------|
| 3 | 12 |
| 4 | 16 |
| 5 | 20 |
| 6 | 24 |

Find the constant of proportionality, then use it to fill in the missing values in the table.

7.

| x | 9 | | 5 | *************************************** |
|---|----|----|---|---|
| у | 36 | 16 | | 8 |

8.

| | | | | |
|---|----|---|----|-------------|
| х | | 6 | 15 | 9 |
| у | .4 | 2 | | |

Constant of Proportionality - Table

L2S1

The values of \boldsymbol{x} and \boldsymbol{y} are proportional. Determine the constant of proportionality(k) and find the missing values.

1)

| x | 9 | | 5 | |
|---|----|----|---|---|
| у | 36 | 16 | | 8 |

2)

| x | • | 6 | 15 | 9 |
|---|---|---|----|---|
| у | 4 | 2 | | |

3)

| · x | 12 | | 30 | 48 |
|-----|----|---|----|----|
| y | | 3 | | 8 |

4)

| x | · | | 4 | |
|---|----|----|----|----|
| y | 25 | 40 | 20 | 60 |

5)

| x | 7 | 11 | 4 | |
|---|---|----|----|----|
| у | | | 32 | 24 |

6)

| x | | 14 | | |
|---|----|----|----|---|
| y | 21 | 6 | 15 | 3 |

7)

| x | | 5 | | 30 |
|---|----|---|---|----|
| у | 14 | | 6 | 12 |

8)

| | x | 3 | 4 | | 7 |
|---|---|----|---|----|---|
| , | у | 18 | | 54 | |