Determining Proportionality with Tables

Name:

Determine if the values in the table are proportional (yes) or not (no).

1)

X	Y
-4	-5
-3	-6
-2	-7
-1	-8

2)

X	Y
6	-2
7	-1
8	0
9	1

3)

X	Y
-70	-10
-56	-8
-14	-2
-7	-1

4)

X	Y
6	3
7	4
8	5
9	6

5)

X	Y
1	10
2	20
7	70
10	100

6)

X	Y
2	2
4	4
8	8
10	10

7)

X	Y
20	-32
15	-24
10	-16
5	-8

8)

X	Y
70	-10
63	-9
35	-5
21	-3

9)

X	Y
2	7
6	21
18	63
20	70

10)

X	Y
-12	-32
-9	-24
-6	-16
-3	-8

11)

X	Y
9	3
36	6
64	8
81	9

12)

X	Y
2	4
3	6
4	12
7	21

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____

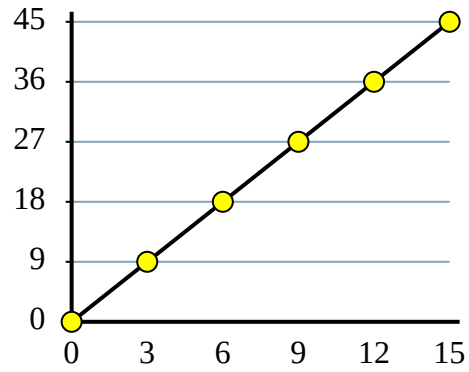
1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Identifying Constant of Proportionality (Graphs)

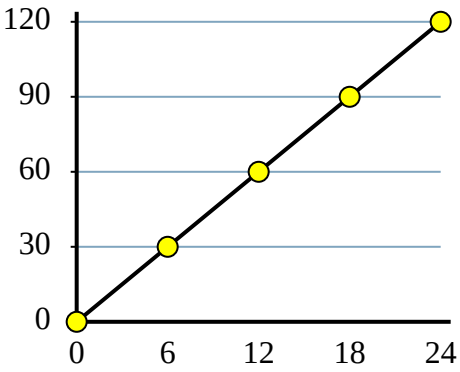
Name:

Identify the constant of proportionality. Write your answer as y = kx

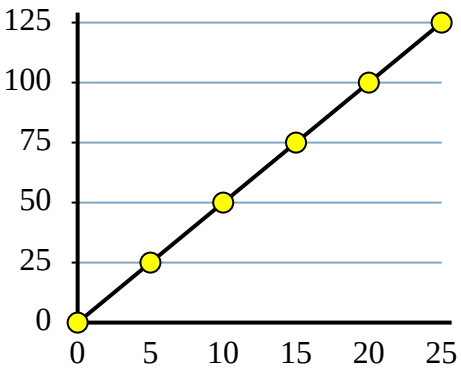
1)



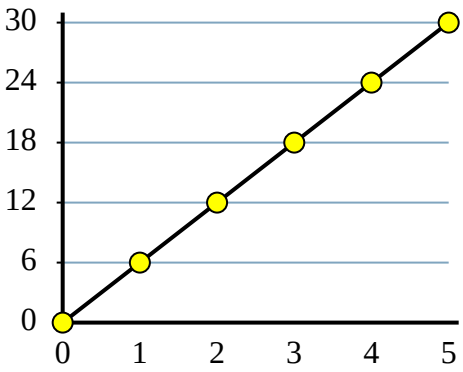
2)



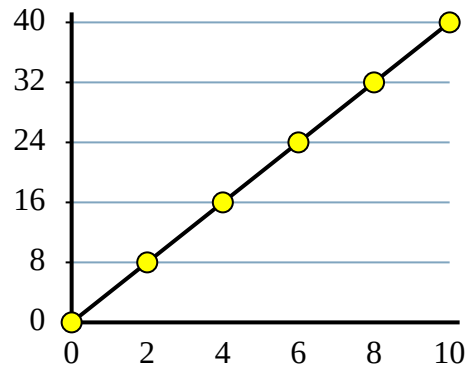
3)



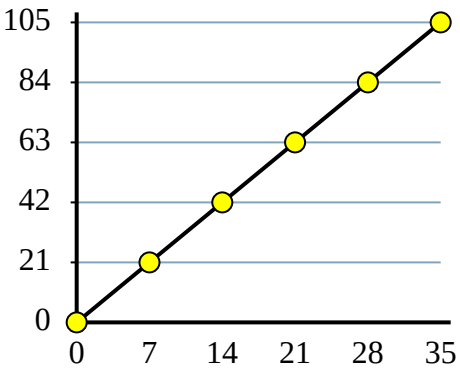
4)



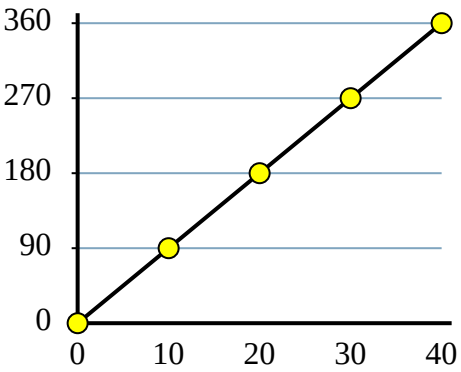
5)



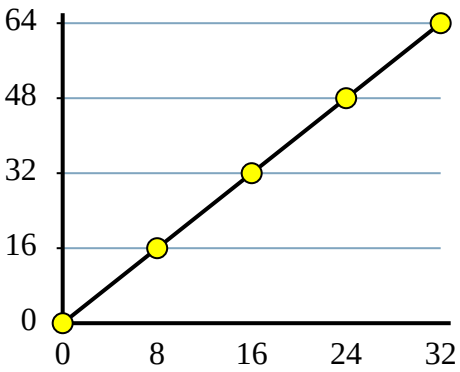
6)



7)



8)



Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

1-8	88	75	63	50	38	25	13	0

Identifying Constant of Proportionality (Tables)

Name:

Determine the constant of proportionality for each table. Express your answer as y = kx

Ex)

Concrete Blocks (x)	3	8	10	6	7
weight in kilograms (y)	30	80	100	60	70

Every concrete block weighs 10 kilograms.

1)

Cans of Paint (x)	5	10	6	9	2
Bird Houses Painted (y)	15	30	18	27	6

For every can of paint you could paint _ bird houses.

2)

Votes for Faye (x)	9	7	6	8	3
Votes for Victor (y)	342	266	228	304	114

For Every vote for Faye there were __ votes for Victor.

3)

Chocolate Bars (x)	6	4	10	3	8
Calories (y)	1,212	808	2,020	606	1,616

Every chocolate bar has ___ calories.

4)

Pieces of Chicken (x)	7	8	6	10	2
Price in dollars (y)	14	16	12	20	4

For each piece of chicken it costs _ dollars.

5)

Boxes of Candy (x)	2	5	9	7	10
Pieces of Candy (y)	32	80	144	112	160

For every box of candy you get __ pieces.

6)

Lawns Mowed (x)	7	6	10	3	4
Dollars Earned (y)	301	258	430	129	172

For every lawn mowed __ dollars were earned.

7)

Time in minute (x)	9	2	7	3	10
Distance traveled in meters (y)	117	26	91	39	130

Every minute __ meters are travelled.

8)

Pounds of Beef Jerky (x)	7	8	5	6	10
Price in dollars (y)	84	96	60	72	120

For every pound of beef jerky it cost __ dollars.

Answers

Ex. y = 10x

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

1-8	88	75	63	50	38	25	13	0

Solve each problem.

1) Using 50 boxes of nails a carpenter was able to finish 450 bird houses. Write an equation that can be used to express the relationship between the total number of birdhouses completed(t) and the boxes of nails(b) used.

2) A chef bought 3 bags of oranges at the supermarket and it cost her $5.82. Write an equation that can be used to express the relationship between the total cost(t) and the number of bags of oranges(b) purchased.

3) It cost $1,144.66 for 86 pounds of beef jerky. Write an equation that can be used to express the relationship between the total cost(t) and the pounds of beef jerky(p) purchased.

4) A school had to buy 27 new science books and it ended up costing $630.72 total. Write an equation that can be used to express the relationship between the total cost(t) and the number of books(b) purchased.

5) A company used 99 lemons to make 11 bottles of lemonade. Write an equation that can be used to express the relationship between the total number of lemons needed (t) for each bottle of lemonade (b).

6) You can buy 4 pieces of chicken for $6.80. Write an equation that can be used to express the relationship between the total price(t) and the pieces of chicken(c) you buy.

7) The combined weight of 12 concrete blocks is 179.64 kilograms. Write an equation that can be used to express the relationship between the total weight(t) and the number of concrete blocks(b) you have.

8) Wendy traveled 73.96 kilometers in 86 minutes. Write an equation that can be used to express the relationship between the total kilometers traveled(t) and the minutes(m) it took.

9) A phone store earned $105.45 after they sold 19 phone cases. Write an equation that can be used to express the relationship between the total money earned (t) and the number of cases(c) sold.

10) At a carnival it costs $6.54 for 3 tickets. Write an equation that can be used to express the relationship between the total cost (t) and the number of tickets(n) you buy.

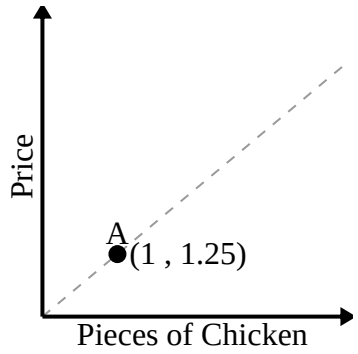
Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

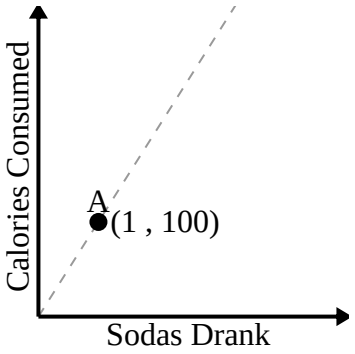
1-10	90	80	70	60	50	40	30	20	10	0

Determine what the value of A means in each problem.

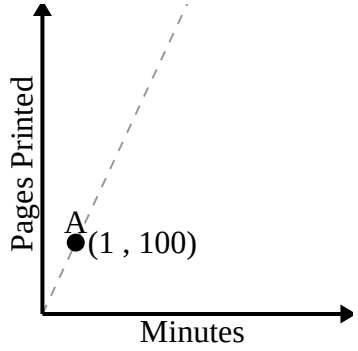
1)



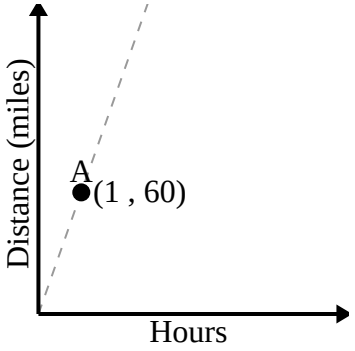
2)



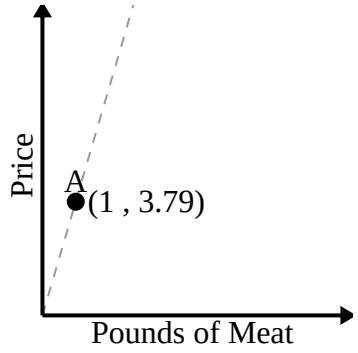
3)



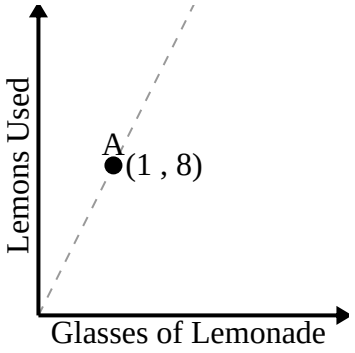
4)



5)



6)



1-6	83	67	50	33	17	0

Finding Amounts with Proportional Relationship Name:

Find the missing value.

1) $\frac{\quad}{60} = \frac{85}{100}$

2) $\frac{\quad}{52} = \frac{25}{100}$

3) $\frac{\quad}{64} = \frac{75}{100}$

4) $\frac{\quad}{68} = \frac{50}{100}$

5) $\frac{\quad}{48} = \frac{50}{100}$

6) $\frac{\quad}{45} = \frac{20}{100}$

7) $\frac{\quad}{40} = \frac{70}{100}$

8) $\frac{\quad}{70} = \frac{70}{100}$

9) $\frac{\quad}{55} = \frac{40}{100}$

10) $\frac{\quad}{36} = \frac{50}{100}$

11) $\frac{\quad}{35} = \frac{20}{100}$

12) $\frac{\quad}{65} = \frac{40}{100}$

13) $\frac{\quad}{28} = \frac{75}{100}$

14) $\frac{\quad}{25} = \frac{24}{100}$

15) $\frac{\quad}{44} = \frac{75}{100}$

16) $\frac{\quad}{20} = \frac{20}{100}$

Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____
13. _____
14. _____
15. _____
16. _____

1-10	94	88	81	75	69	63	56	50	44	38
11-16	31	25	19	13	6	0				