Determining Proportionality with Tables Name:

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

1)

X	Y
-9	-13
-8	-12
-7	-11
-6	-10

2)

X	Y
1	1
5	5
6	6
8	8

3)

X	Y
6	2
12	4
56	8
70	10

4)

X	Y
-20	-40
-15	-30
-10	-20
-5	-10

5)

X	Y
7	-3
8	-2
9	-1
10	0

6)

X	Y
80	-10
72	-9
56	-7
24	-3

7)

X	Y
-4	0
-3	-1
-2	-2
-1	-3

8)

X	Y
4	2
9	3
64	8
100	10

9)

X	Y
5	3
6	4
7	5
8	6

10)

X	Y
-9	-27
-8	-24
-5	-15
-4	-12

11)

X	Y
8	9
24	27
32	36
56	63

12)

X	Y
2	2
5	5
8	8
9	9

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								

Determining Proportionality with Tables Name: **Answer Key**

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

1)

X	Y	
-9	-13	0.69
-8	-12	0.67
-7	-11	0.64
-6	-10	0.60

2)

X	Y	
1	1	1.00
5	5	1.00
6	6	1.00
8	8	1.00

3)

X	Y	
6	2	3.00
12	4	3.00
56	8	7.00
70	10	7.00

4)

X	Y	
-20	-40	0.50
-15	-30	0.50
-10	-20	0.50
-5	-10	0.50

5)

X	Y	
7	-3	-2.33
8	-2	-4.00
9	-1	-9.00
10	0	0.00

6)

X	Y	
80	-10	-8.00
72	-9	-8.00
56	-7	-8.00
24	-3	-8.00

7)

X	Y	
-4	0	0.00
-3	-1	3.00
-2	-2	1.00
-1	-3	0.33

8)

X	Y	
4	2	2.00
9	3	3.00
64	8	8.00
100	10	10.00

9)

X	Y	
5	3	1.67
6	4	1.50
7	5	1.40
8	6	1.33

10)

X	Y	
-9	-27	0.33
-8	-24	0.33
-5	-15	0.33
-4	-12	0.33

11)

X	Y	
8	9	0.89
24	27	0.89
32	36	0.89
56	63	0.89

12)

X	Y	
2	2	1.00
5	5	1.00
8	8	1.00
9	9	1.00

Answers

1. no
2. yes
3. no
4. yes
5. no
6. yes
7. no
8. no
9. no
10. yes
11. yes
12. yes

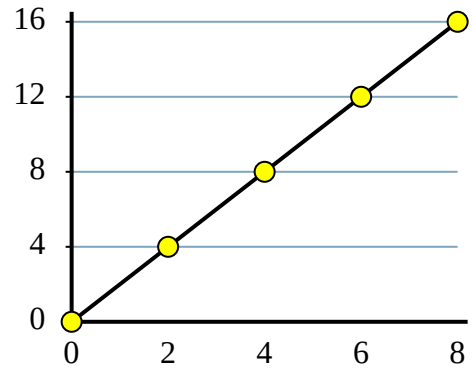
1-10	92	83	75	67	58	50	42	33	25	17
11-12	8	0								

Identifying Constant of Proportionality (Graphs)

Name:

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

1)



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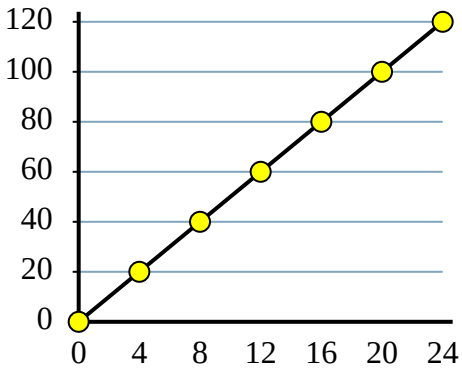

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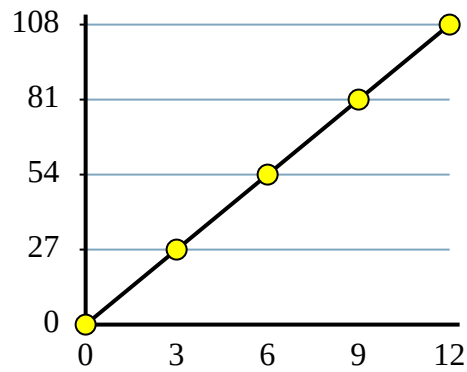

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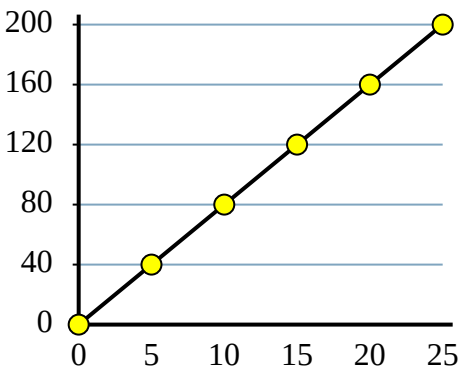

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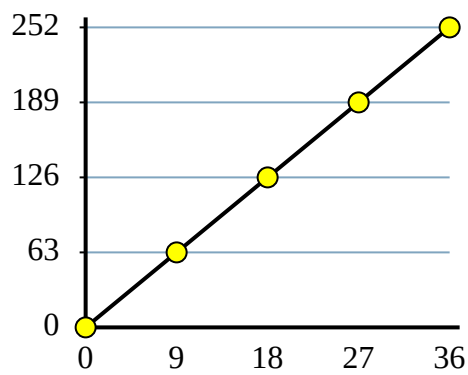

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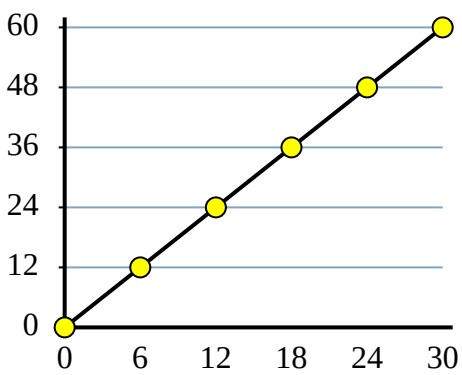

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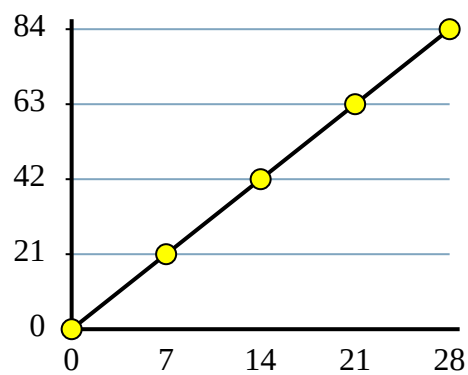

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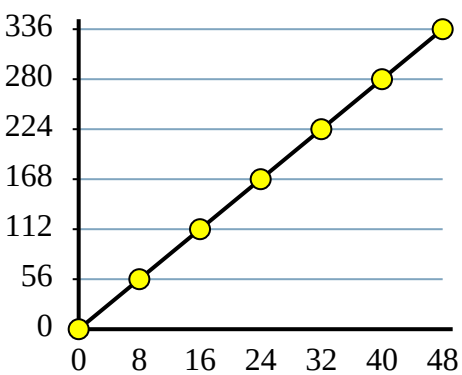


Answers

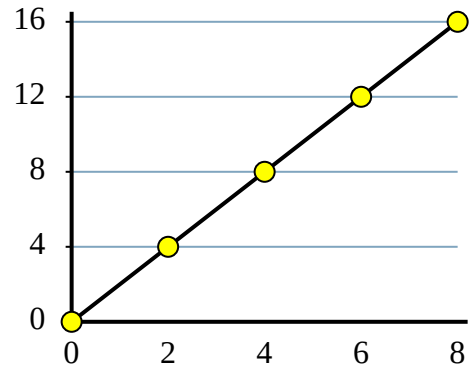
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____

1-8	88	75	63	50	38	25	13	0

Identifying Constant of Proportionality (Graphs) Name: **Answer Key**

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

1)



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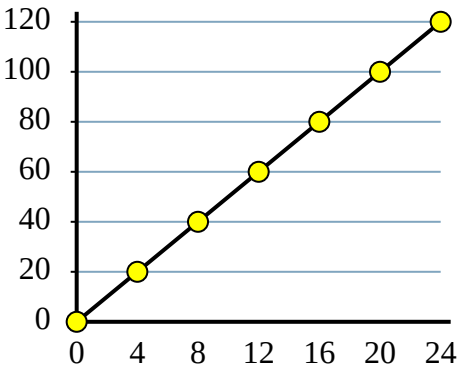

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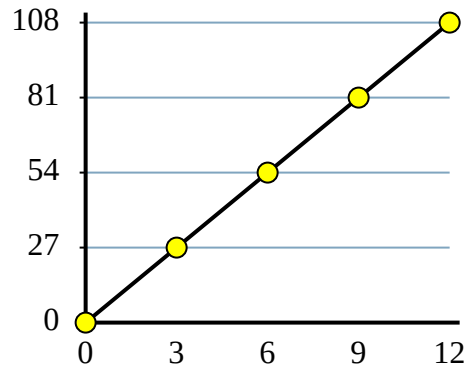

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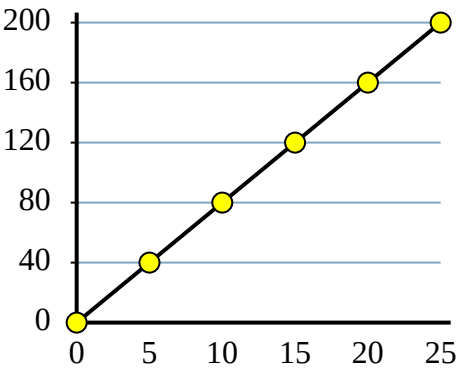

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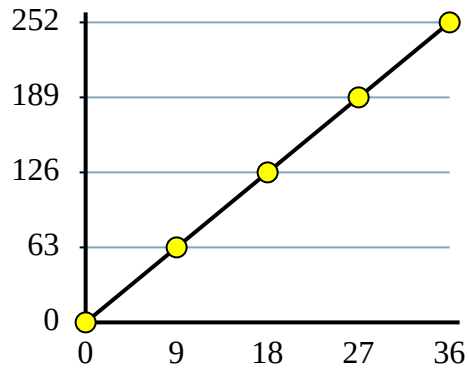
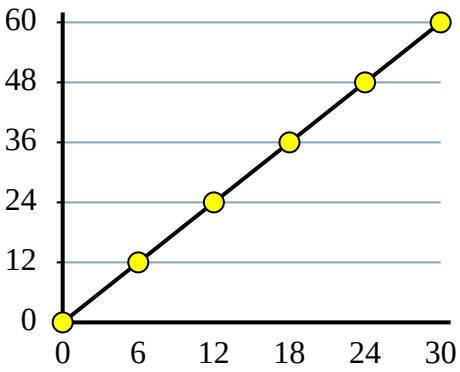
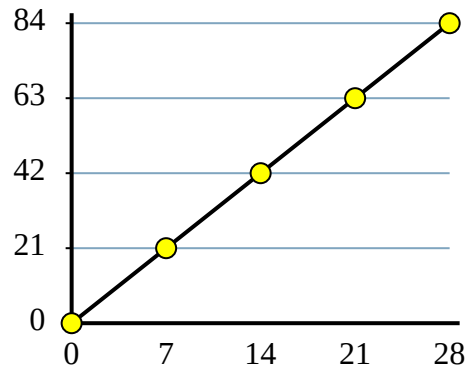


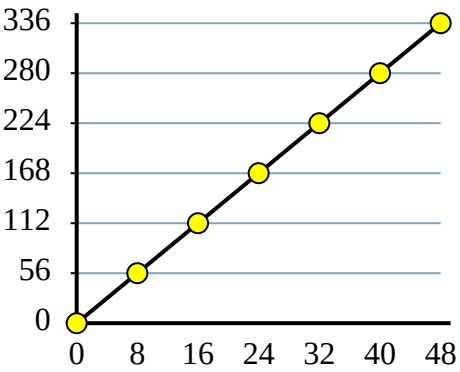
6)



7)



8)



Answers

1. y = 2x
2. y = 5x
3. y = 9x
4. y = 8x
5. y = 7x
6. y = 2x
7. y = 3x
8. y = 7x

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)

Phone Sold (x)	9	4	6	5	3
Money Earned (y)	369	164	246	205	123

Every phone sold earns 41 dollars.

1)

Pieces of Chicken (x)	5	9	4	10	8
Price in dollars (y)	5	9	4	10	8

For each piece of chicken it costs _ dollars.

2)

Enemies Destroyed (x)	9	5	6	4	7
Points Earned (y)	297	165	198	132	231

Every enemy destroyed earns __ points.

3)

Time in minute (x)	2	6	8	10	9
Distance traveled in meters (y)	34	102	136	170	153

Every minute __ meters are travelled.

4)

Tickets Sold (x)	8	3	6	2	10
Money Earned (y)	112	42	84	28	140

Every ticket sold __ dollars are earned.

5)

Votes for Bianca (x)	9	10	4	5	3
Votes for Luke (y)	198	220	88	110	66

For Every vote for Bianca there were __ votes for Luke.

6)

Glasses of Lemonade (x)	4	10	9	3	6
Lemons Used (y)	12	30	27	9	18

For every glass of lemonade there were _ lemons used.

7)

Chocolate Bars (x)	7	4	5	3	10
Calories (y)	1,869	1,068	1,335	801	2,670

Every chocolate bar has ___ calories.

8)

Boxes of Candy (x)	8	3	2	6	10
Pieces of Candy (y)	120	45	30	90	150

For every box of candy you get __ pieces.

Answers

Ex. y = 41x

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

1-8	88	75	63	50	38	25	13	0

Identifying Constant of Proportionality (Tables) Name: **Answer Key**

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

Ex)

Phone Sold (x)	9	4	6	5	3
Money Earned (y)	369	164	246	205	123

Every phone sold earns 41 dollars.

1)

Pieces of Chicken (x)	5	9	4	10	8
Price in dollars (y)	5	9	4	10	8

For each piece of chicken it costs 1 dollars.

2)

Enemies Destroyed (x)	9	5	6	4	7
Points Earned (y)	297	165	198	132	231

Every enemy destroyed earns 33 points.

3)

Time in minute (x)	2	6	8	10	9
Distance traveled in meters (y)	34	102	136	170	153

Every minute 17 meters are travelled.

4)

Tickets Sold (x)	8	3	6	2	10
Money Earned (y)	112	42	84	28	140

Every ticket sold 14 dollars are earned.

5)

Votes for Bianca (x)	9	10	4	5	3
Votes for Luke (y)	198	220	88	110	66

For Every vote for Bianca there were 22 votes for Luke.

6)

Glasses of Lemonade (x)	4	10	9	3	6
Lemons Used (y)	12	30	27	9	18

For every glass of lemonade there were 3 lemons used.

7)

Chocolate Bars (x)	7	4	5	3	10
Calories (y)	1,869	1,068	1,335	801	2,670

Every chocolate bar has 267 calories.

8)

Boxes of Candy (x)	8	3	2	6	10
Pieces of Candy (y)	120	45	30	90	150

For every box of candy you get 15 pieces.

Answers

Ex. y = 41x

1. y = 1x
2. y = 33x
3. y = 17x
4. y = 14x
5. y = 22x
6. y = 3x
7. y = 267x
8. y = 15x

1-8	88	75	63	50	38	25	13	0

Solve each problem.

1) Using 99 boxes of nails a carpenter was able to finish 396 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 97 bags of oranges at the supermarket and it cost her $103.79. 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 $627.20 for 40 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 59 new science books and it ended up costing $3,898.72 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 420 lemons to make 70 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 10 pieces of chicken for $24.80. 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 108.60 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 79.91 kilometers in 61 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 $149.76 after they sold 72 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 $166.80 for 60 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

Solve each problem.

1) Using 99 boxes of nails a carpenter was able to finish 396 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 97 bags of oranges at the supermarket and it cost her $103.79. 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 $627.20 for 40 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 59 new science books and it ended up costing $3,898.72 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 420 lemons to make 70 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 10 pieces of chicken for $24.80. 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 108.60 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 79.91 kilometers in 61 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 $149.76 after they sold 72 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 $166.80 for 60 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. **t = b4**
2. **t = b1.07**
3. **t = p15.68**
4. **t = b66.08**
5. **t = b6**
6. **t = c2.48**
7. **t = b9.05**
8. **t = m1.31**
9. **t = c2.08**
10. **t = n2.78**

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