

1. True or False? Explain your answer.

The ratio between the diameter of a circle and its circumference is proportional.

2. True or False? Explain your answer.

The ratio between the side length of a square and its area is proportional.

3. Determine if the relationship shown in the table is proportional or not proportional.

Hours Worked	4	6	9	14	15
Money Paid	27	40.50	60.75	94.50	101.25

Explain how you know.

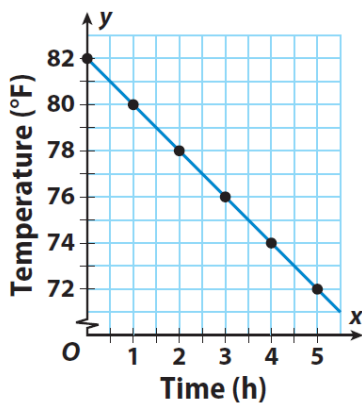
4. Determine if the relationship shown in the table is proportional or not proportional.

Data Used (Gb)	3	5	7	9	11
Amount of Bill	93	123	153	183	213

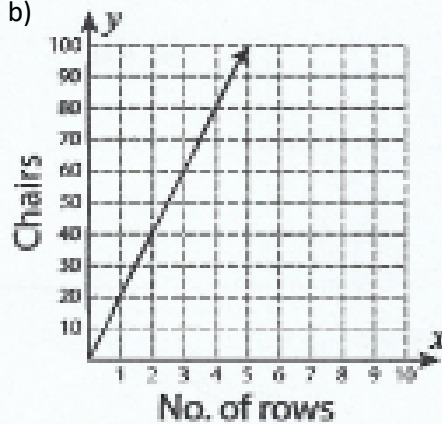
Explain how you know.

3. Determine whether the relationship between the two quantities shown in each graph is proportional. Explain how you know.

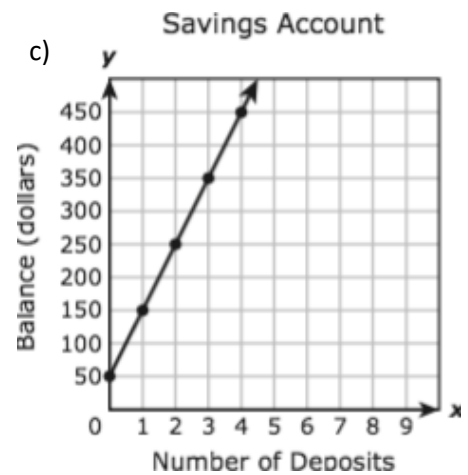
a) **Tank Temperature**



b)



c)



4. Gilberto inherited a stamp collection with 185 stamps in it. Each month he added 3 more stamps to his collection. Is this a proportional situation? Explain how you know.

7.2.3 Is It Proportional? Practice **Answers**

1. True or False? Explain your answer.

The ratio between the diameter of a circle and its circumference is proportional.

TRUE $C = \pi \times \text{diameter}$ A circle with diameter 0 has circumference of 0. Pi is the constant of proportionality.

2. True or False? Explain your answer.

The ratio between the side length of a square and its area is proportional.

FALSE $A = \text{side}^2$ As the side increases, the area increases by the square of the side. No constant increase.

3. Determine if the relationship shown in the table is proportional or not proportional.

Hours Worked	4	6	9	14	15
Money Paid	27	40.50	60.75	94.50	101.25

Explain how you know.

Yes it is proportional. Divide money by hours for each set of numbers, \$6.75 is the constant. It would be the hourly wage.

4. Determine if the relationship shown in the table is proportional or not proportional.

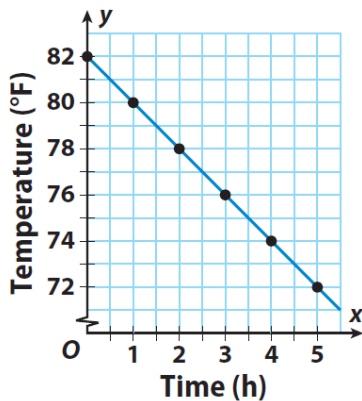
Data Used (Gb)	3	5	7	9	11
Amount of Bill	93	123	153	183	213

Explain how you know.

NO it is not proportional. Divide: The Amount of Bill / Data Used is a different amount for each pair.

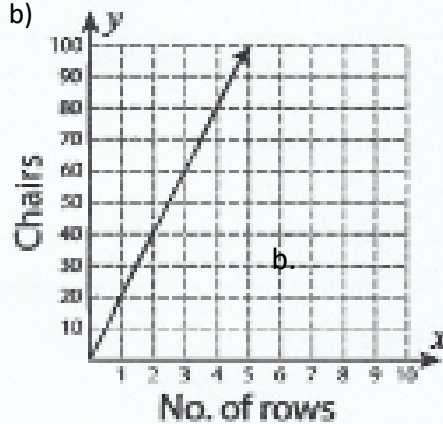
3. Determine whether the relationship between the two quantities shown in each graph is proportional. Explain how you know.

a) **Tank Temperature**



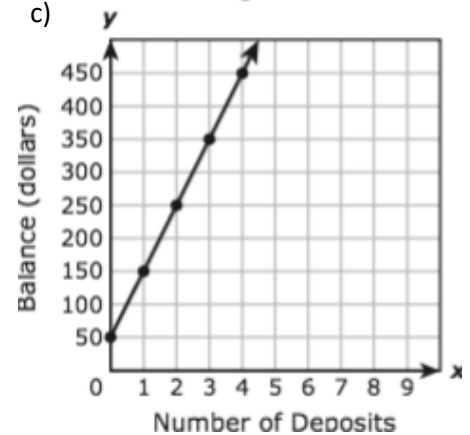
DOESN'T GO THROUGH (0, 0)

b)



Yes, straight line through (0, 0)

c) **Savings Account**



DOESN'T GO THROUGH (0, 0)

4. Gilberto inherited a stamp collection with 185 stamps in it. Each month he added 3 more stamps to his collection. Is this a proportional situation? Explain how you know.

Not proportional, he didn't start with 0 stamps.