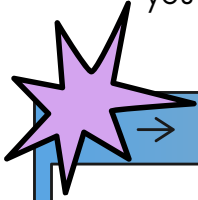


Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Graphing Proportional Relationships

Read each problem carefully. Answer the questions that follow using the concepts you learned about linear relationships. You may refer to your notes and textbooks.



Casper wants to investigate the relationship between the mass of a box of crackers and the number of crackers inside it. Given the data below, (a) determine the equation of the line and (b) identify the relationship between the mass of a box of crackers and the number of crackers it contains.

Number of Crackers	Total Mass (g)
20	100
40	150
60	200
80	250

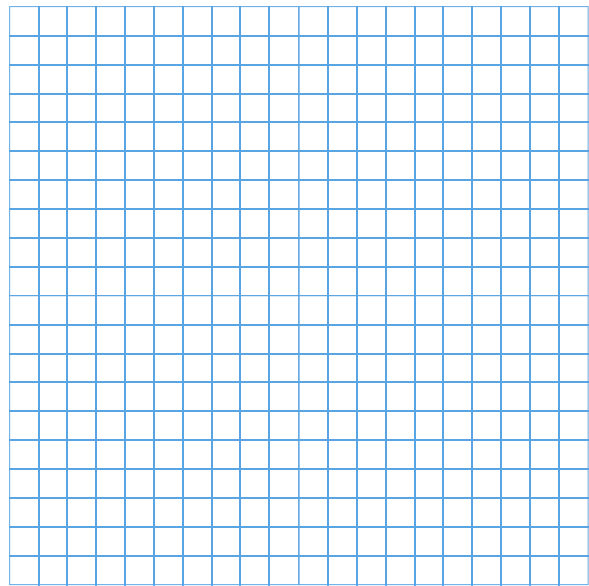
Equation of the Line:

\_\_\_\_\_

Relationship between the two variables:

\_\_\_\_\_

\_\_\_\_\_



Lilian and her friends rode a hot air balloon during a festival. She noticed that as time passed by, the hot air balloon rose higher and higher. The change in the hot air's altitude with time is recorded in the table below. Given the data, (a) determine the equation of the line and (b) find out how high would the hot air balloon be after 40 minutes.

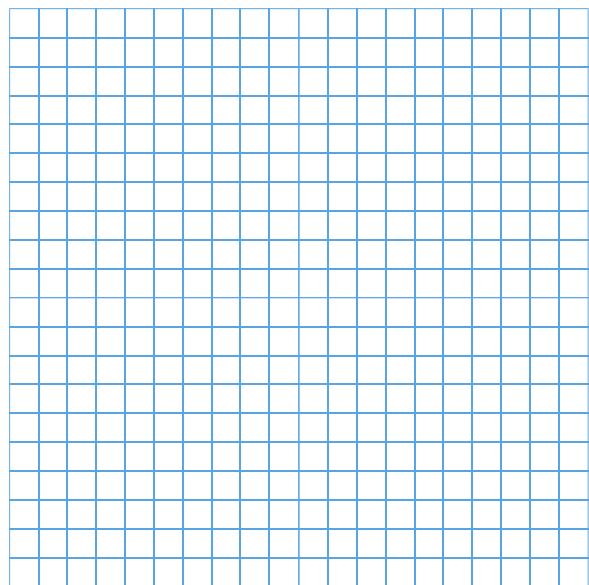
Time (min)	Altitude (m)
10	30
20	50
30	70

Equation of the Line:

\_\_\_\_\_

Altitude of the hot air balloon after 40 minutes:

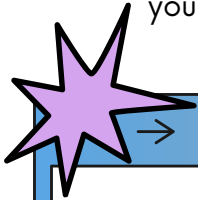
\_\_\_\_\_



# Answer Key

## Graphing Proportional Relationships

Read each problem carefully. Answer the questions that follow using the concepts you learned about linear relationships. You may refer to your notes and textbooks.



→



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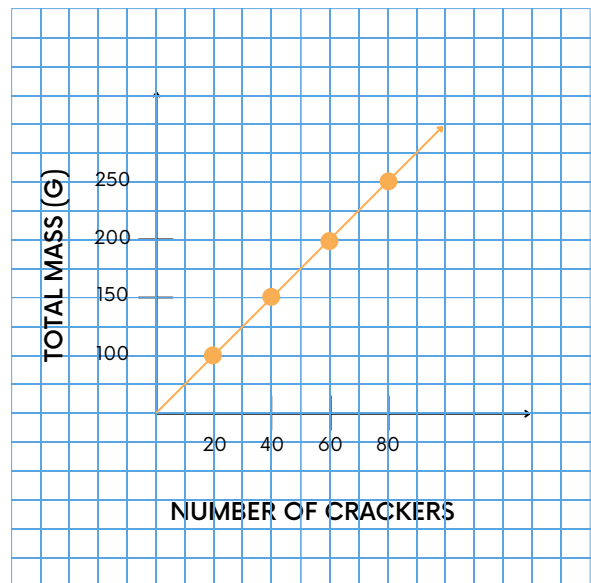
Equation of the Line:

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Relationship between the two variables:

---

---



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Equation of the Line:

---

Altitude of the hot air balloon after 40 minutes:

---

