Complete numbers 7 - 8 in your composition book.

8) An athlete burns 200 calories weight lifting. The athlete then works out on an elliptical trainer and burns 10 calories for every minute. Write and graph an equation in two variables that represent the total number of calories burned during the workout.

What are you trying to find out?

number of calories burned

What stays the same?

200 calories were burned lifting weights

10 calories per minute on elliptical

What is the dependent variable?

number of calories burned

Put the problem into words.

An athlete burns 200 calories weight lifting. The athlete then works out on an elliptical trainer and burns 10 calories for every minute. Write and graph an equation in two variables that represent the total number of calories burned during the workout.

What are you trying to find out?
number of calories burned

What stays the same?
200 calories were burned lifting weights
10 calories per minute on elliptical

What is the dependent variable?
number of calories burned

Put the problem into words.

The total number of calories	is	from	calories from weight lifting	and (plus)	calories per minute on elliptical	times	number of minutes on the elliptical

c = 200 + 10 • m

c = 200 + 10m

An athlete burns 200 calories weight lifting. The athlete then works out on an elliptical trainer and burns 10 calories for every minute. Write and graph an equation in two variables that represent the total number of calories burned during the workout.

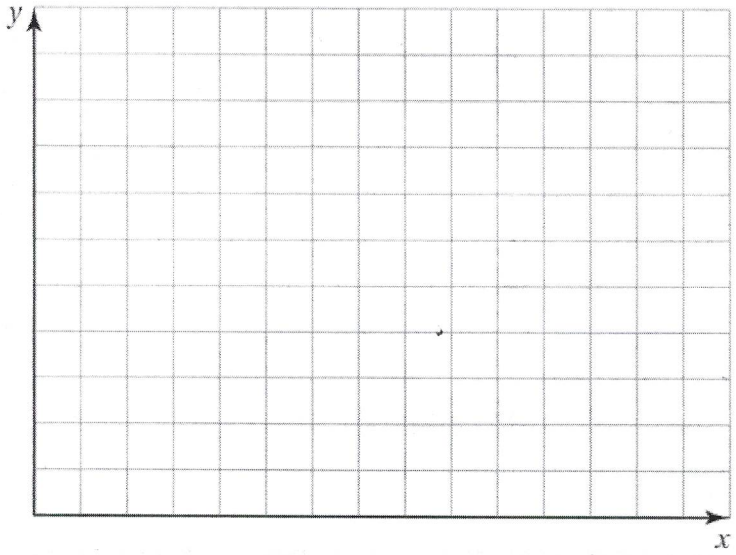
c = 200 + 10m	m	c	ordered pair (m, c)
	10		
	20		
	30		

An athlete burns 200 calories weight lifting. The athlete then works out on an elliptical trainer and burns 10 calories for every minute. Write and graph an equation in two variables that represent the total number of calories burned during the workout.

$c = 200 + 10m$	m	c	ordered pair (m, c)
$c = 200 + 10(10)$	10	300	10, 300
$c = 200 + 10(20)$	20	400	20, 400
$c = 200 + 10(30)$	30	500	30, 500

What is the independent variable? It goes on the x axis.

What is the dependent variable? It goes on the y axis.



Calories Burned by an Athlete