

A fitness club

membership has \$100

initiation fee plus a \$19

monthly fee. The

function  $y = 19x + 100$

represents the cost  $y$  (in

dollars) of a membership

after  $x$  months.

**discrete**

**Continuous**

The perimeter of a

carpet is 32 feet. The

function  $32 = 2l + 2w$

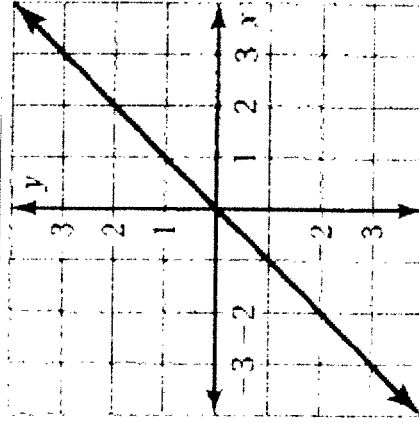
represents the length  $l$

and width  $w$  of the

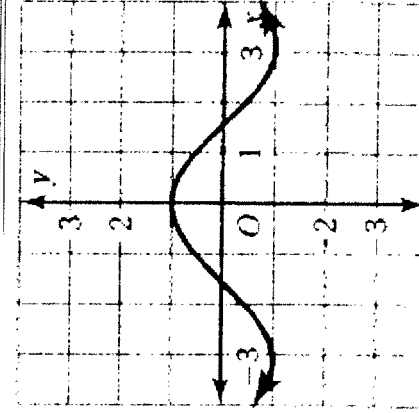
carpet.

**Continuous**

**discrete**



**Continuous**



**Continuous**

The function  $F = 9/5 C + 32$  converts temperature from Celsius  $C$  to Fahrenheit  $F$ .



**Continuous**

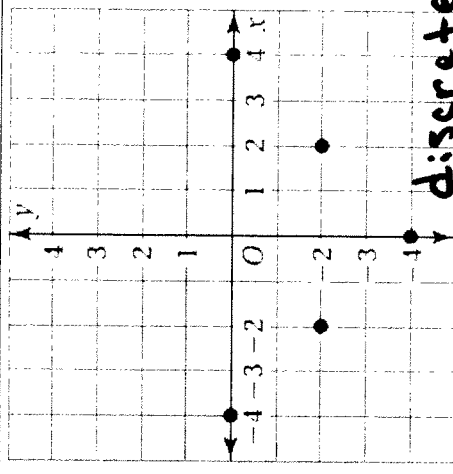


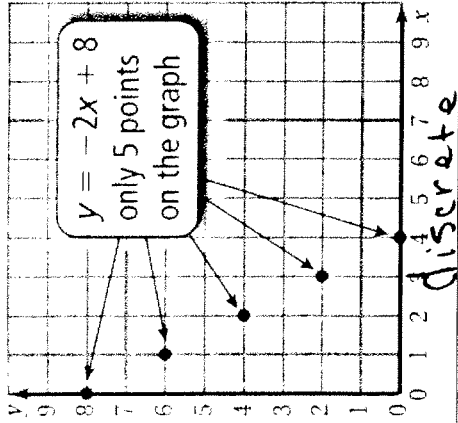
**discrete**

The function  $15 = 3x + 2y$  represents how many \$3 packs of colored pens  $x$  and \$2 drawing pads  $y$  you can buy spending exactly \$15.



**Continuous**



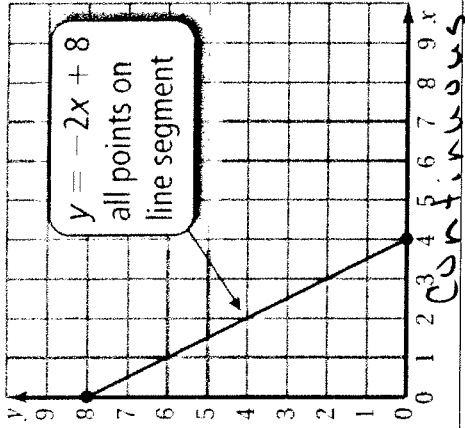


You are in charge of reserving hotel rooms for a youth soccer team. Each room costs \$69, plus \$6 tax, per night. You need each room for two nights. You need 10 to 16 rooms. Write a function for the total hotel cost.

discrete

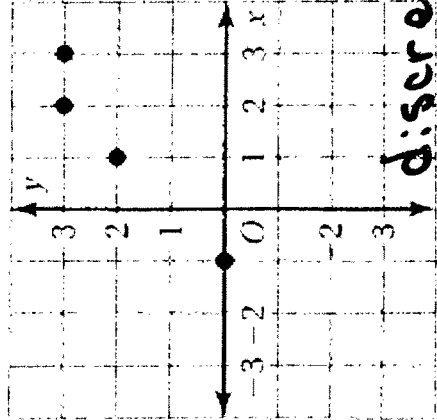
The function  $y = 12x$  represents the cost  $y$  (in dollars) to hit  $x$  buckets of golf balls at a driving range.

discrete



The airline you are using for the soccer trip needs an estimate of the total weight of the team's luggage. You determine that there will be 36 pieces of luggage and each piece will weigh from 25 to 45 pounds. Write a function for the total weight of the luggage.

Continuous



discrete

Input Length, $x$ (inches)	Output Area, $y$ (square inches)
2	12
4	24
6	36

Continuous

The function  $c = 20 + 10m$  represents the amount of calories you burn after  $m$  minutes of exercising. Is the domain discrete or continuous?

Continuous

Input Shirts, $x$	Output Cost, $y$ (dollars)
0	0
1	9.25
2	18.50

discrete

A car traveling 65 miles per hour brakes at a steady rate to a stop. The function  $y = -5t + 65$  represents the speed  $y$  of the car after 5 seconds. Is the domain discrete or continuous?

Continuous