

Question #74727, Math / Algebra

*Condition*

Scientists are studying the temperature on a distant planet. They find that the surface temperature at one location is 20 Celsius. They also find that the temperature decreases by 3 Celsius for each kilometer you go up from the surface.

Let  $Y$  represent the temperature (in Celsius), and let  $X$  be the height above the surface (in kilometers). Write an equation relating  $Y$  to  $X$ , and then graph your equation using the axes below.

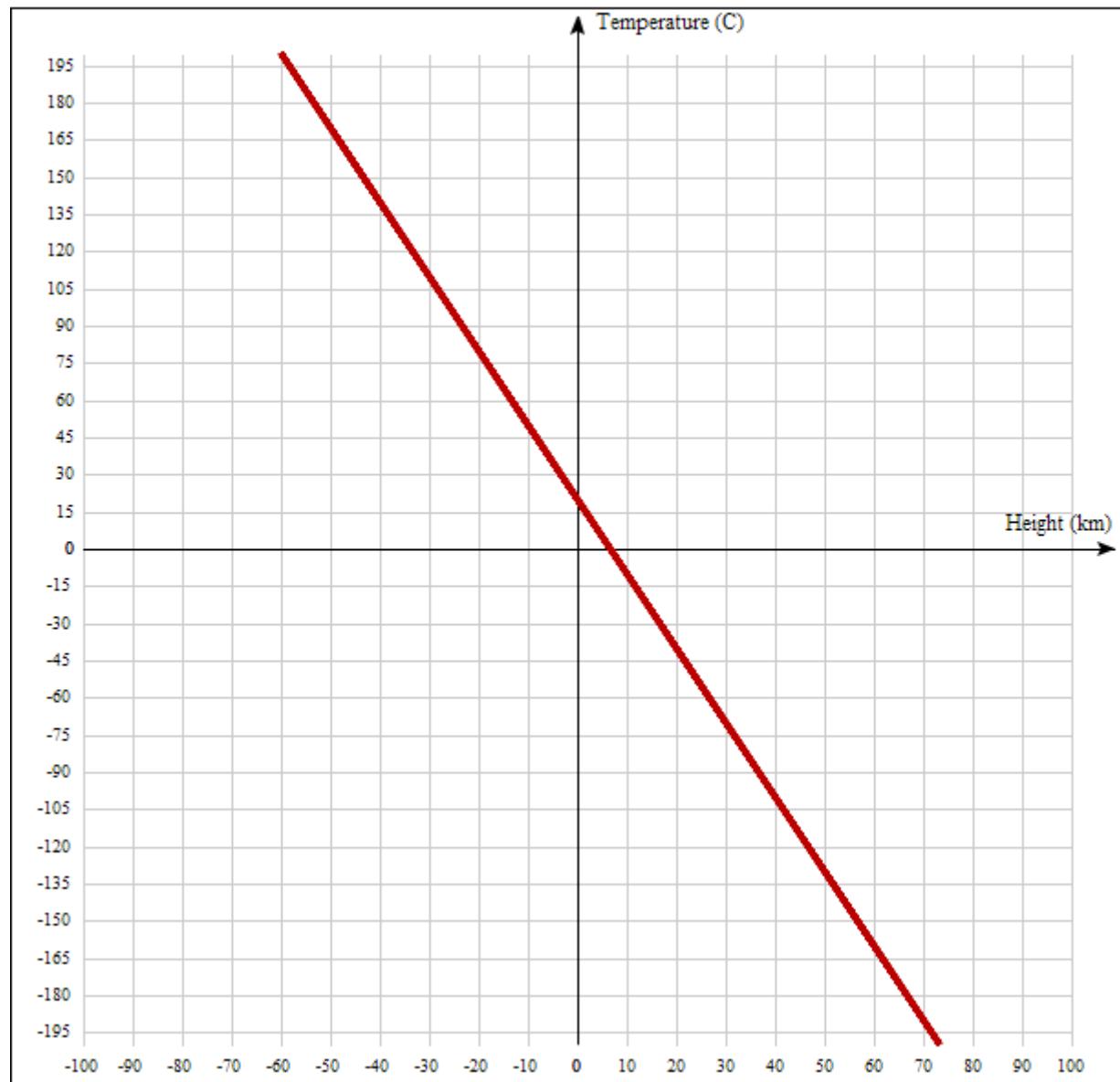
*Solution*

An equation is

$$Y = 20 - X * 3$$

Where  $X$  - the height above the surface. And  $Y$  is the temperature above the surface on  $X$  kilometers.

*Graph*



*There is point table:*

x	y
-100	320
-90	290
-80	260
-70	230
-60	200
-50	170
-40	140
-30	110
-20	80
-10	50
0	20
10	-10
20	-40
30	-70
40	-100
50	-130
60	-160
70	-190
80	-220
90	-250
100	-280

*Answer:*

$$Y = 20 - X * 3$$

Answer provided by <https://www.AssignmentExpert.com>