

Answer on Question #58236 – Math – Algebra

Question

Scientists are studying the temperature on a distant planet. They find that the surface temperature at one location is 35° Celsius. They also find that the temperature decreases by 5° Celsius for each kilometer you go up from the surface.

Solution

Given

$$T(0) = 35^\circ\text{C},$$

$$|\Delta T| = 5^\circ\text{C}.$$

The formula for the temperature on a distant planet is given by

$$T(x) = 35 - 5x = 5(7 - x),$$

where x is the distance from the surface in kilometers.