

Let:

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

$$C(100) = 100^{\circ}\text{C}$$

$$Y(0) = 10^{\circ}$$

$$Y(100) = 130^{\circ}$$

$$Y(127) = 127^{\circ}$$

 $C(127) = ?$
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It's possible to present dependence C from Y as equation:

$$C(x) = a * Y(x) + b$$

Write a system of equations:

$$\begin{cases} 10a + b = 0 \\ 130a + b = 100 \end{cases}$$

Solve a system:

$$\begin{cases} b = -10a \\ 130a + b = 100 \\ b = -10a \\ 130a - 10a = 100 \\ 10a + b = 0 \\ a = \frac{100}{120} \end{cases}$$

$$a = \frac{10}{12}, b = -100/12$$

Equation:

$$C(x) = \frac{10}{12}Y(x) - 100/12$$

Enter data:

$$C(127) = 127 \frac{10}{12} - \frac{100}{12}$$

$$C(127) = 97.5^{\circ}\text{C}$$

Answer:

"A" - 97.5°C