

Gabarito Lista 2 - Temperatura

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1. (a) $Ra = \frac{9}{5}C + 491,67$;
(b) Mostre!
(c) Mostre!
2. (a) $y = \frac{L}{2}\sqrt{2\alpha\Delta T}$;
(b) $y = 2,74$ m.
3. (a) $R = \frac{d(1 + \alpha_i\Delta T)}{(\alpha_c - \alpha_i)\Delta T}$;
(b) $\theta = \frac{L}{d}(\alpha_c - \alpha_i)\Delta T$;
(c) $h = L\sqrt{2\alpha_c\Delta T}$.
(d) $R = 3,1$ m, $\theta = 0.032$, $h = 1.84$ mm.
4. (a) Mostre!
- (b) $\Delta A = 16\alpha(lw)\Delta T$.
(c) expansão.
5. $h = \frac{V(\gamma - 3\alpha)\Delta T}{A(1 + 2\alpha\Delta T)}$.
6. (a) Mostre!
(b) $\gamma = 0.00005$ °C⁻¹.
(c) $\gamma = -0.000025$ °C⁻¹.
(d) dilatação normal e dilatação anômala, respectivamente.
7. (a) $P/3$.
(b) $3T$.
8. (a) Mostre!
(b) $1,3$ kg/m³.