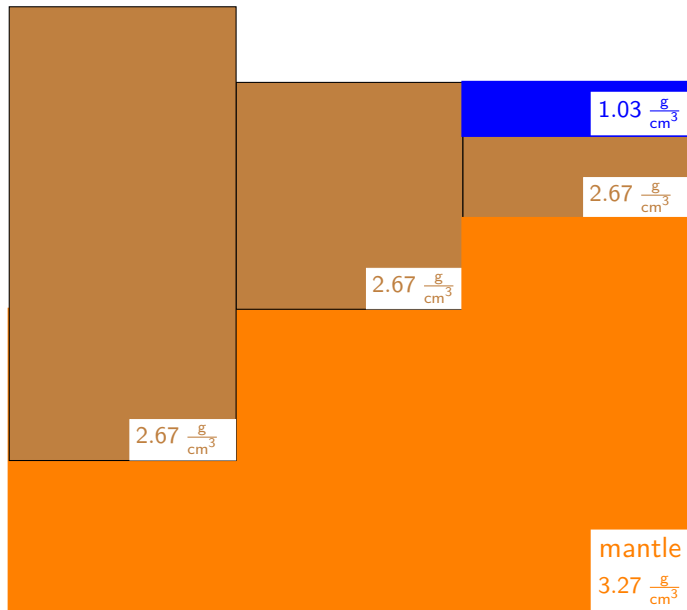
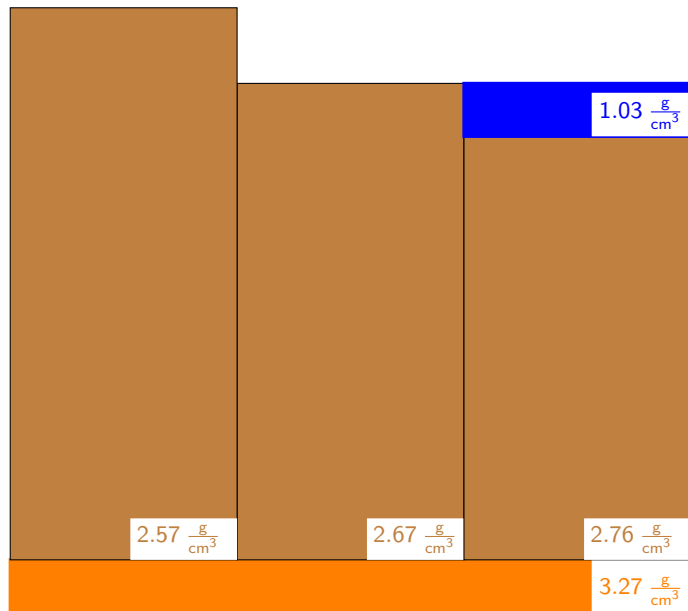


Airy-Heiskenen



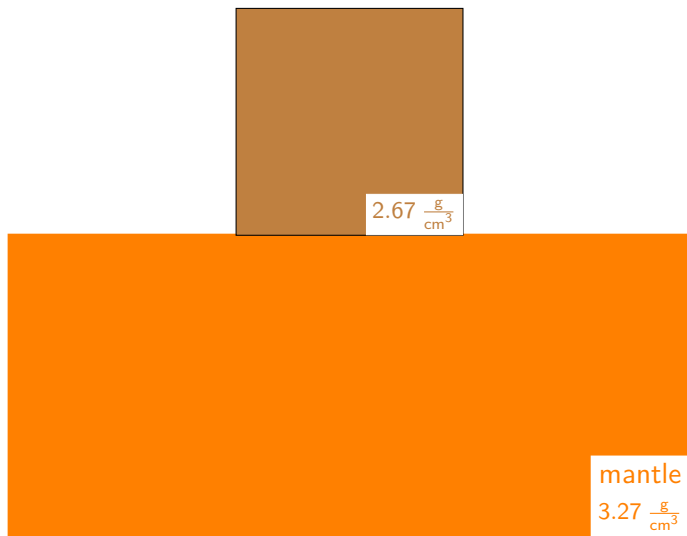
Pratt-Hayford



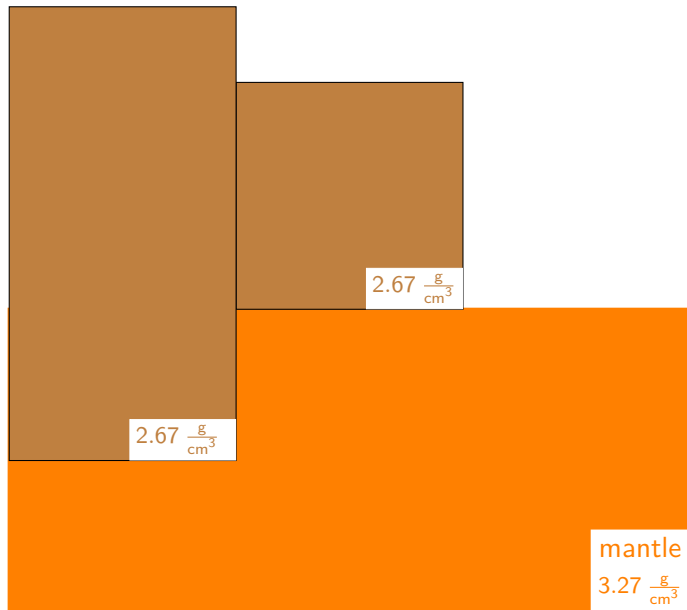
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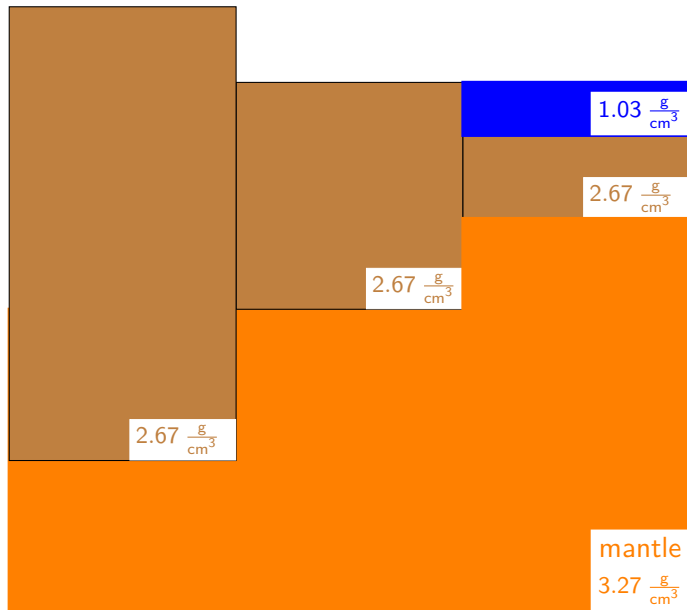
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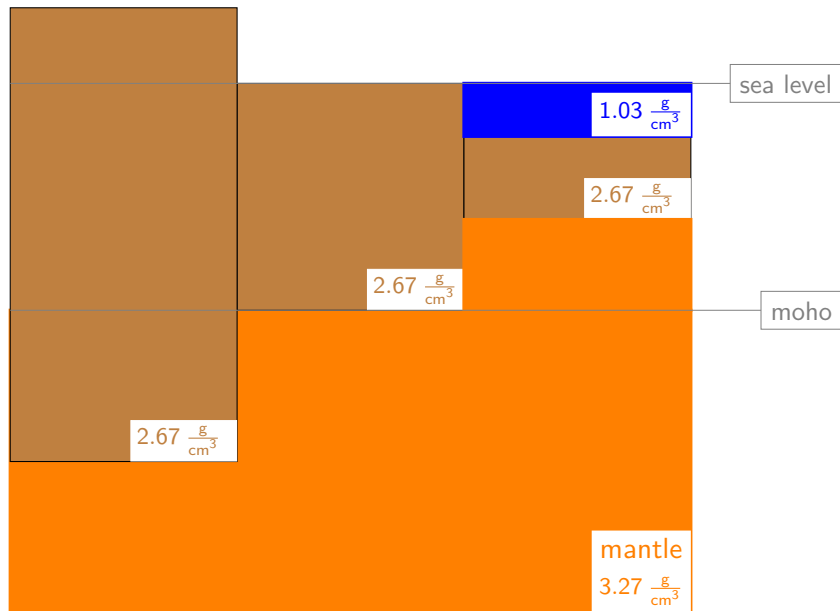
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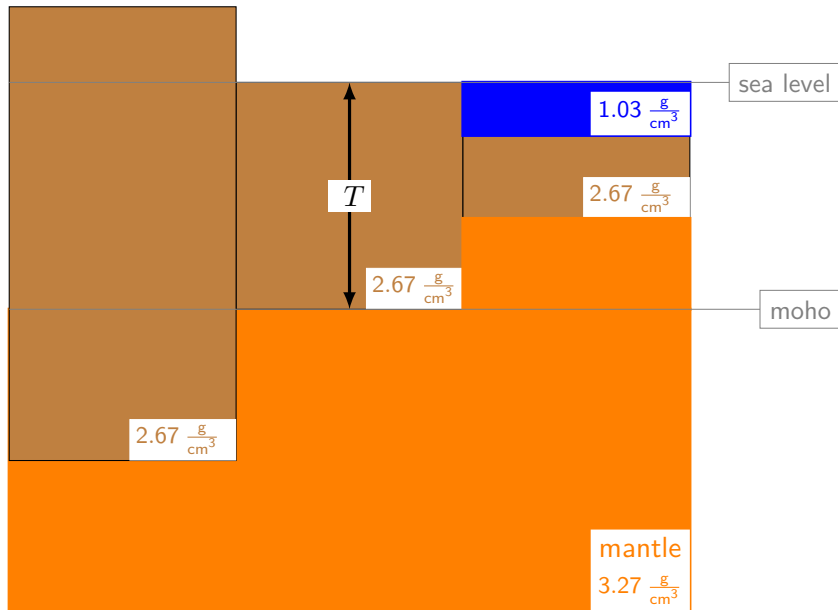
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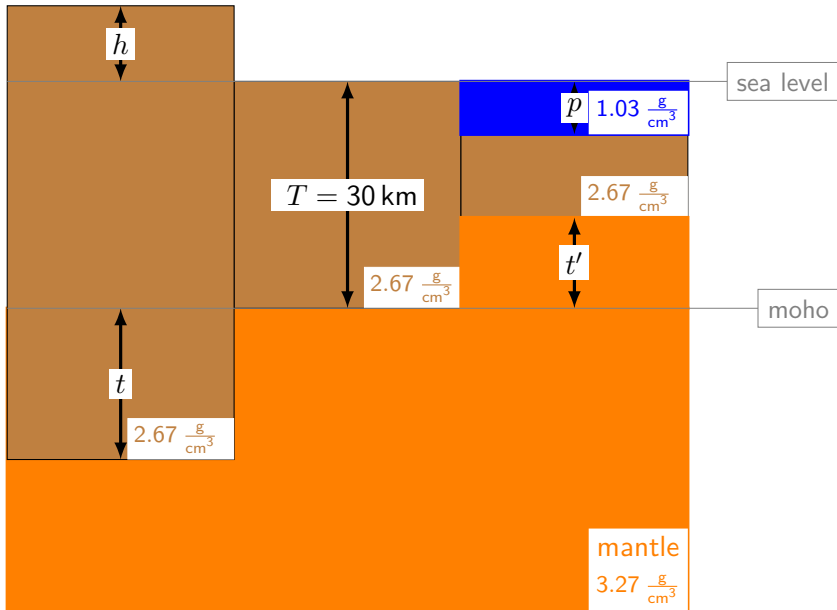
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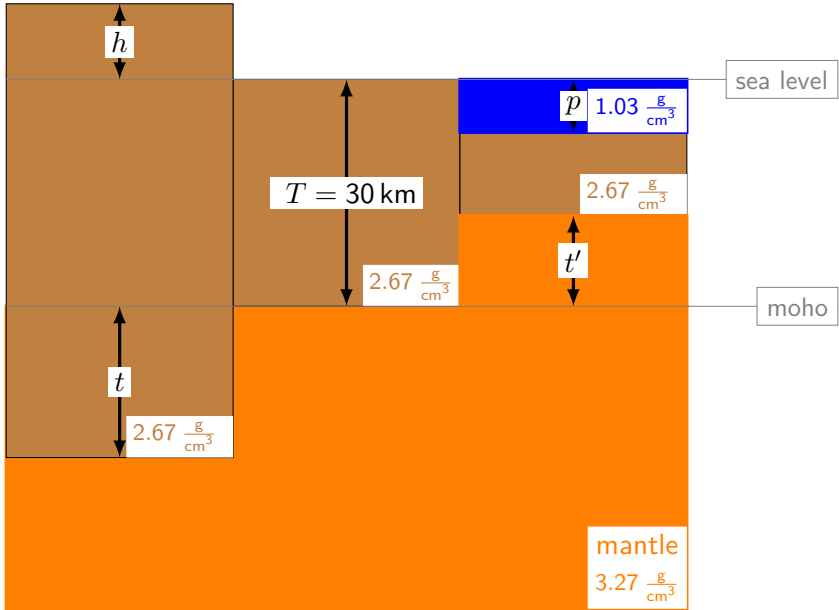
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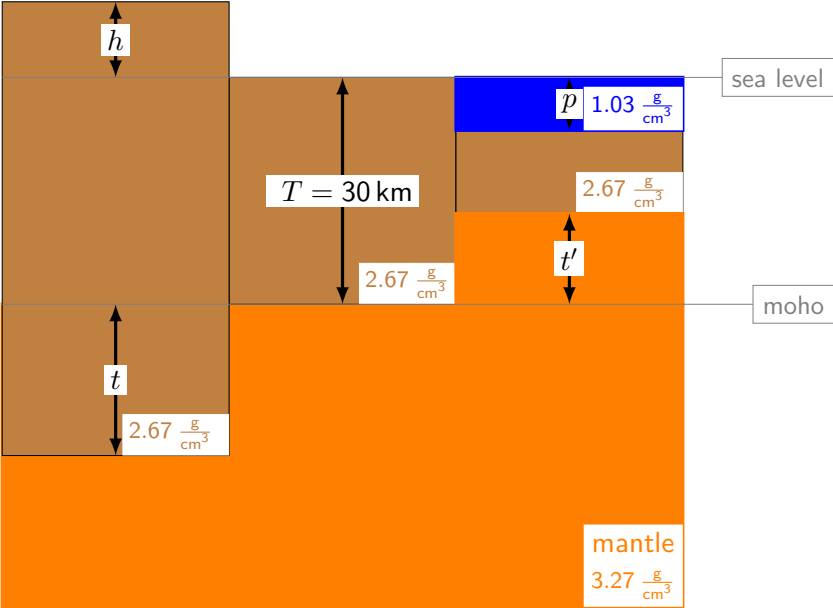
Airy-Heiskenen



How deep has to be root (t) for mountains with height (h) of 8 km?



How deep has to be anti-root (t') for ocean depth (p) of 10 km?



For mountain root

$$h \cdot \rho_c = (\rho_m - \rho_c) \cdot t$$

For mountain root

$$h \cdot \rho_c = (\rho_m - \rho_c) \cdot t$$

$$t = \frac{\rho_c}{(\rho_m - \rho_c)} \cdot h$$

For mountain root

$$h \cdot \rho_c = (\rho_m - \rho_c) \cdot t$$

$$t = \frac{\rho_c}{(\rho_m - \rho_c)} \cdot h$$

$$t = 4.45 \cdot h$$

For sea anti-root

$$p \cdot (\rho_c - \rho_w) = (\rho_m - \rho_c) \cdot t'$$

For sea anti-root

$$p \cdot (\rho_c - \rho_w) = (\rho_m - \rho_c) \cdot t'$$
$$t' = \frac{(\rho_c - \rho_w)}{(\rho_m - \rho_c)} \cdot p$$

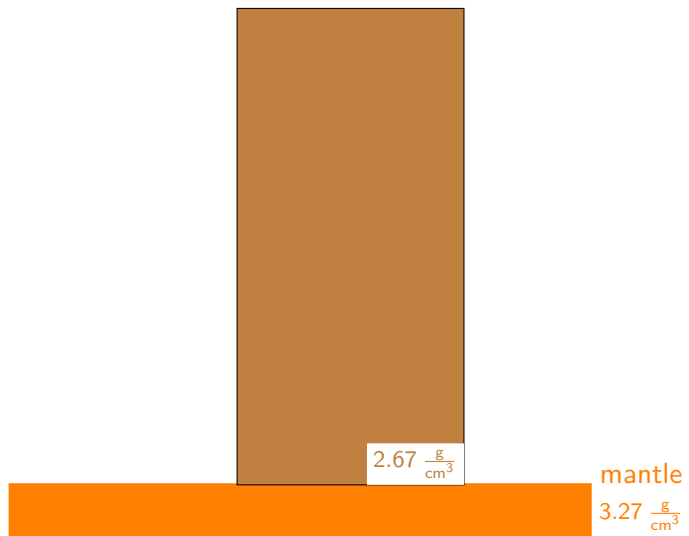
For sea anti-root

$$p \cdot (\rho_c - \rho_w) = (\rho_m - \rho_c) \cdot t'$$

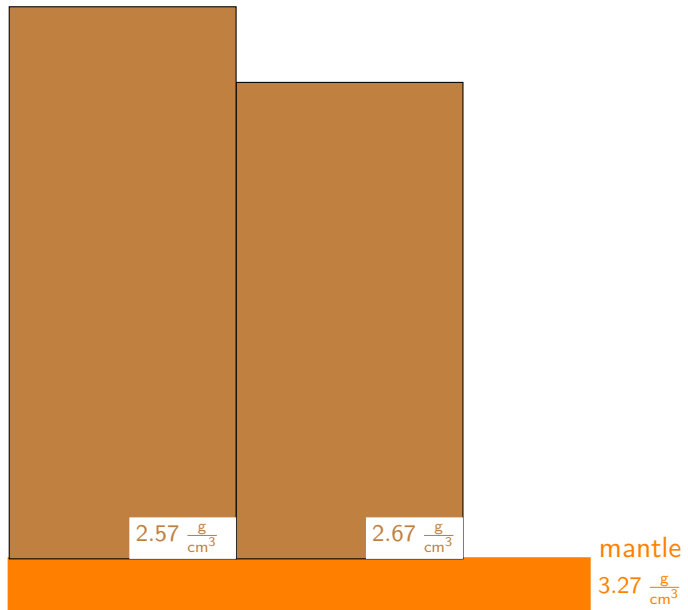
$$t' = \frac{(\rho_c - \rho_w)}{(\rho_m - \rho_c)} \cdot p$$

$$t' = 2.73 \cdot p$$

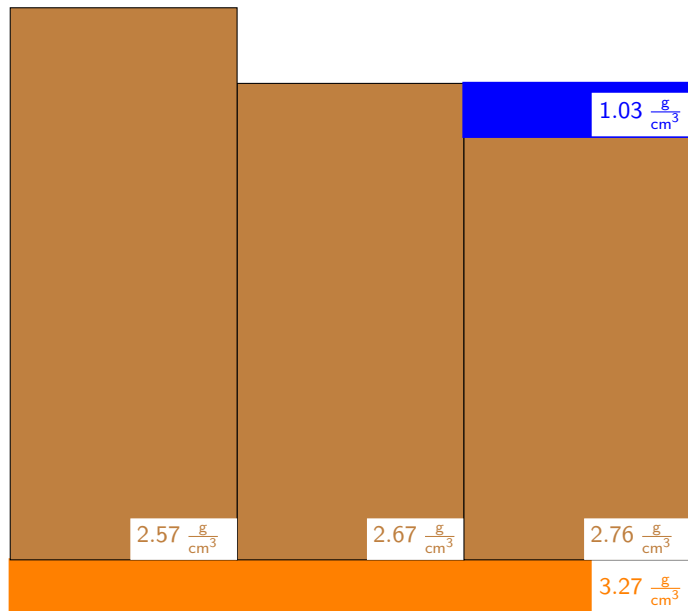
Pratt-Hayford



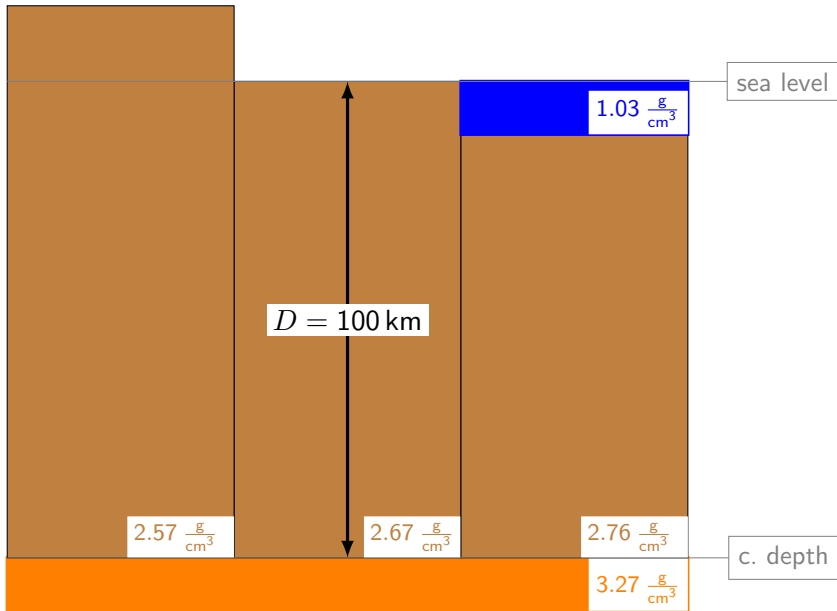
Pratt-Hayford



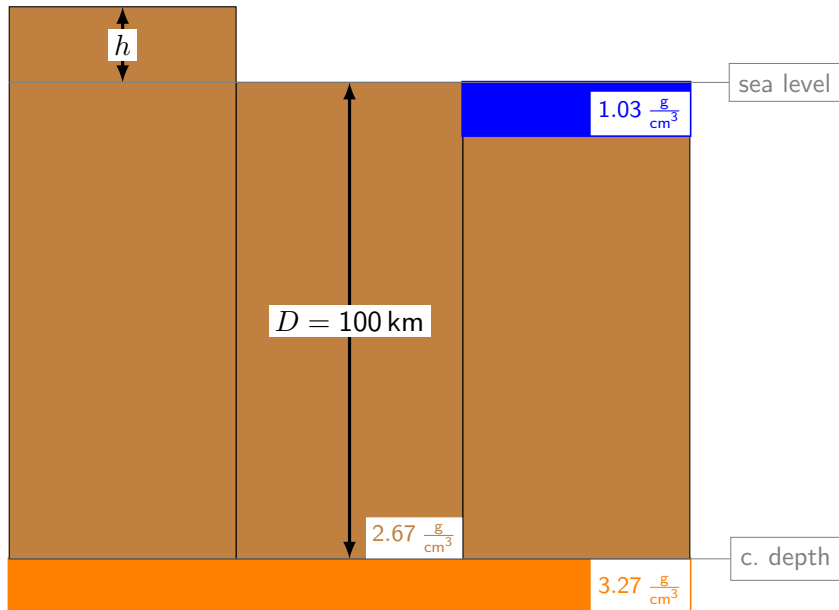
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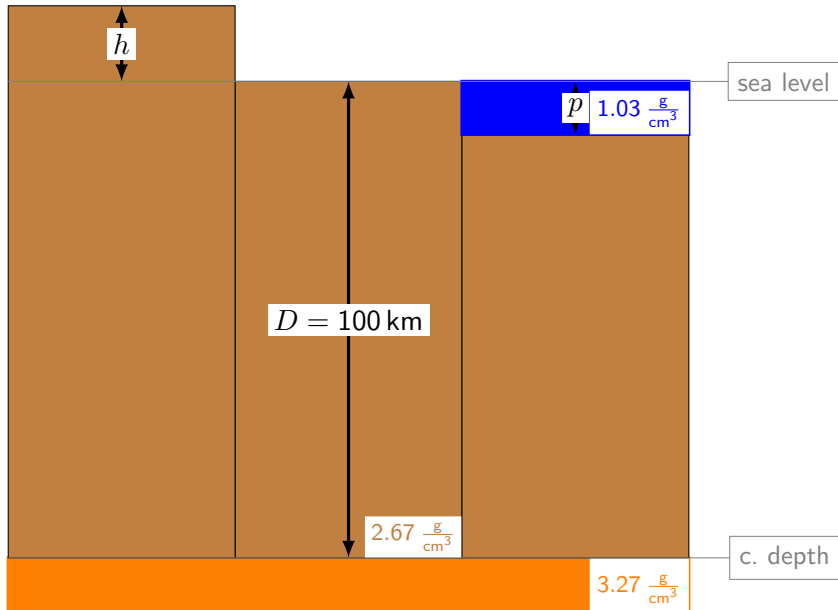
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How much should be density of block with height of 8 km?



How much should be density of block with ocean of 10 km depth?



Density of mountain block

$$(D + h) \cdot \rho = D \cdot \rho_c$$

Density of mountain block

$$(D + h) \cdot \rho = D \cdot \rho_c$$

$$\rho = \rho_c \cdot \frac{D}{D + h}$$

Density of mountain block

$$(D + h) \cdot \rho = D \cdot \rho_{\bar{c}}$$

$$\rho = \rho_{\bar{c}} \cdot \frac{D}{D + h}$$

$$\Delta\rho = -\rho_{\bar{c}} \cdot \frac{h}{D + h}$$

Density of ocean block

$$D \cdot \rho_{\bar{c}} = (D - p) \cdot \rho + p \cdot \rho_w$$

Density of ocean block

$$D \cdot \rho_{\bar{c}} = (D - p) \cdot \rho + p \cdot \rho_w$$

$$\rho = \frac{D\rho_{\bar{c}} - p\rho_w}{D - p}$$

Density of ocean block

$$D \cdot \rho_{\bar{c}} = (D - p) \cdot \rho + p \cdot \rho_w$$

$$\rho = \frac{D\rho_{\bar{c}} - p\rho_w}{D - p}$$

$$\Delta\rho = (\rho_{\bar{c}} - \rho_w) \frac{p}{D - p}$$