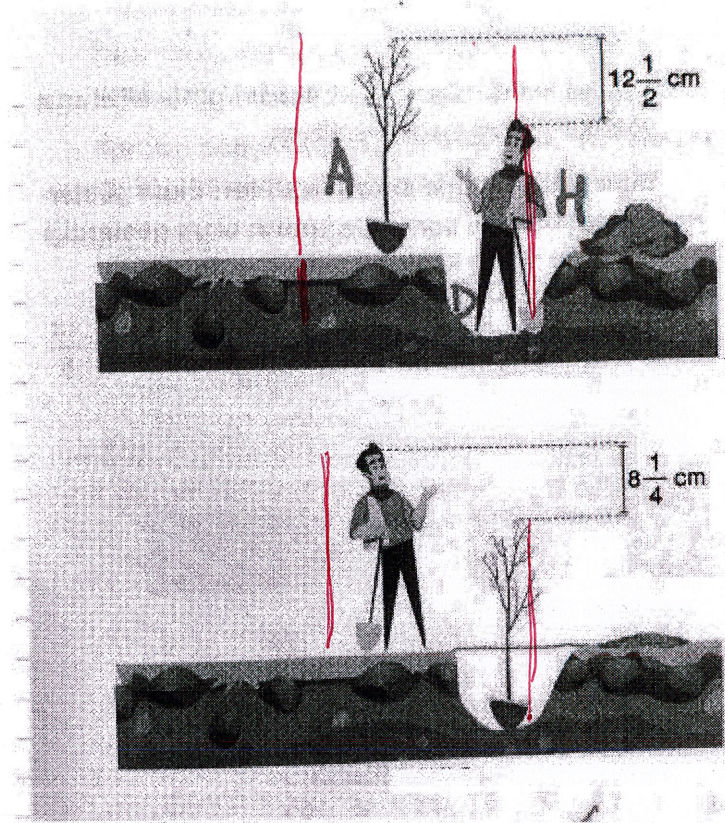


Problem of the week for Week 6 in Math 170



Using the two scenarios, can you find the depth of the hole.

The drawing suggests using:

A for height of tree (maybe an apple tree)

H for height of human

D for depth of hole.

1st

$$A + D = H + 12.5 \text{ cm}$$

$$A + D - H = 12.5 \text{ cm}$$

2nd

$$H + D = A + 8.25 \text{ cm}$$

$$H + D - A = 8.25 \text{ cm}$$

vertical format

$$\begin{array}{r} \cancel{A} + D - \cancel{H} = 12.5 \text{ cm} \\ + \quad -\cancel{A} + D + \cancel{H} = 8.25 \text{ cm} \\ \hline \end{array}$$

$$2D = 20.75$$

$$D = 10.375 \text{ cm}$$