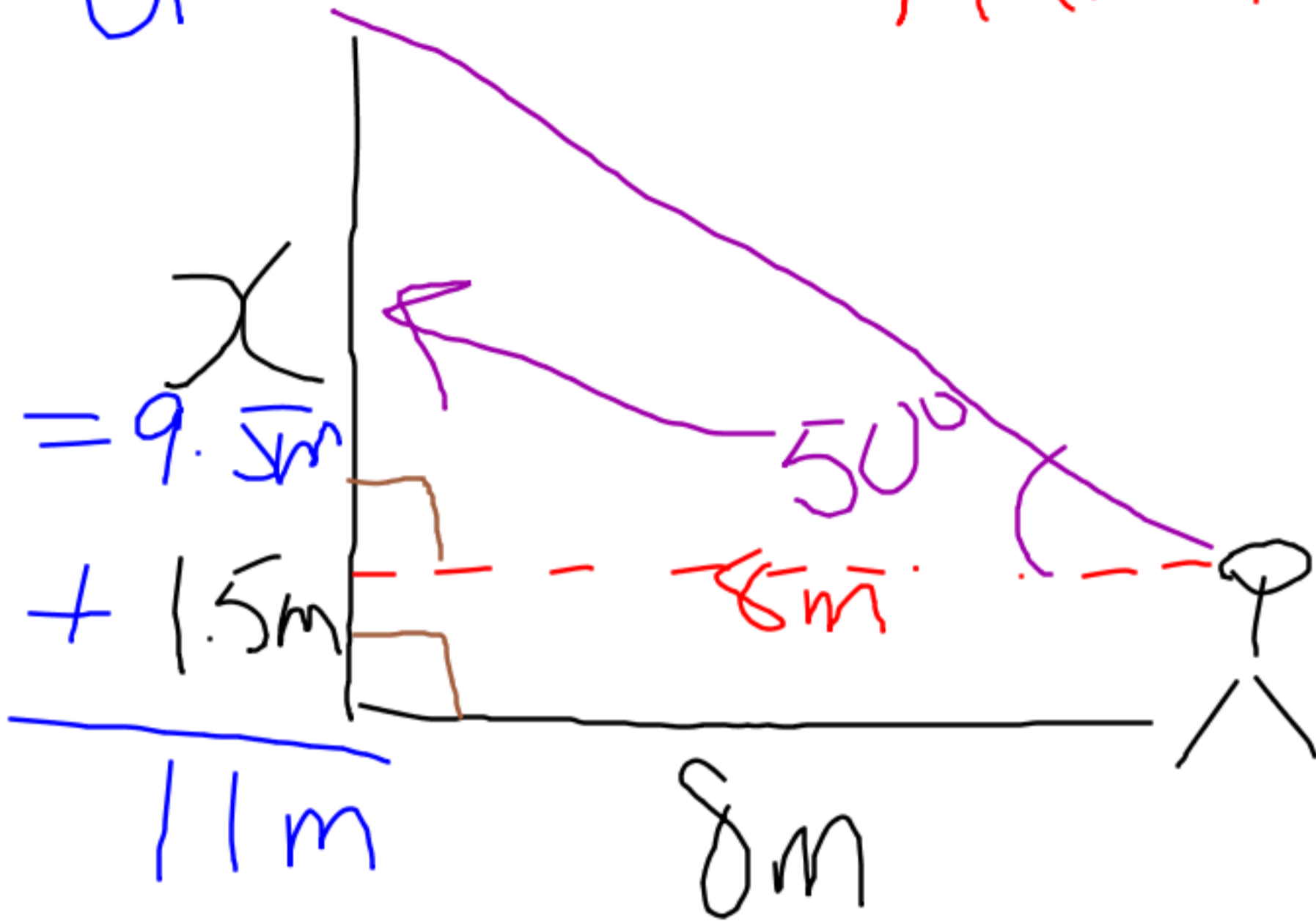


Given:



Find: the height of the bldg

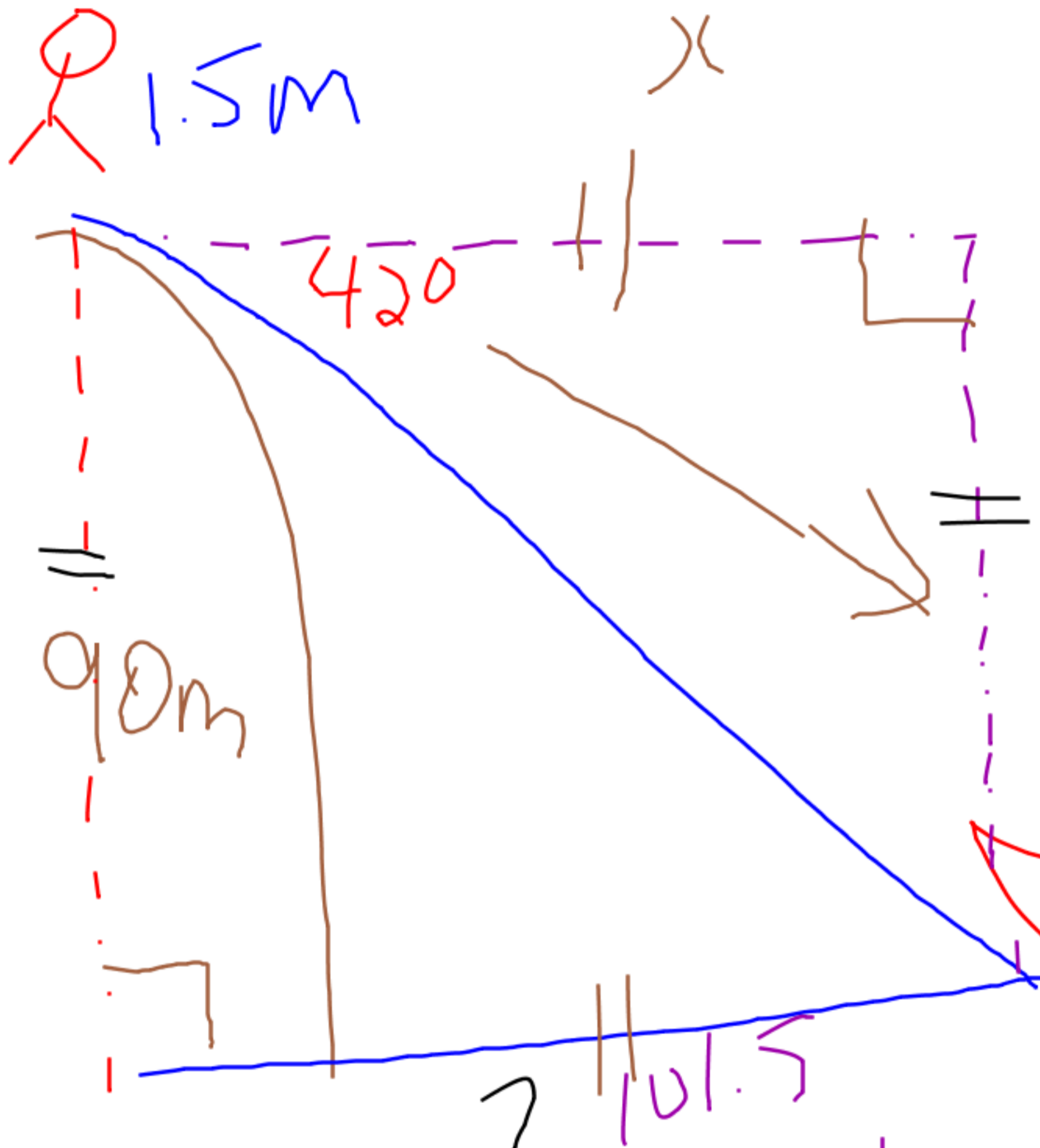
$$\tan 50^\circ = \frac{O}{A}$$

$$\tan 50^\circ = \frac{x}{8}$$

$$x = 8 \tan 50^\circ$$

$$x = 9.5$$

∴ the building  
is 11m



$$\tan 42^\circ = \frac{O}{A}$$

$$\tan 42^\circ = \frac{90}{x}$$

$$x \tan 42^\circ = \frac{90}{\tan 42^\circ \tan 42^\circ}$$

$$x = 101.5$$

∴ The boat is 101.5m away from base of cliff