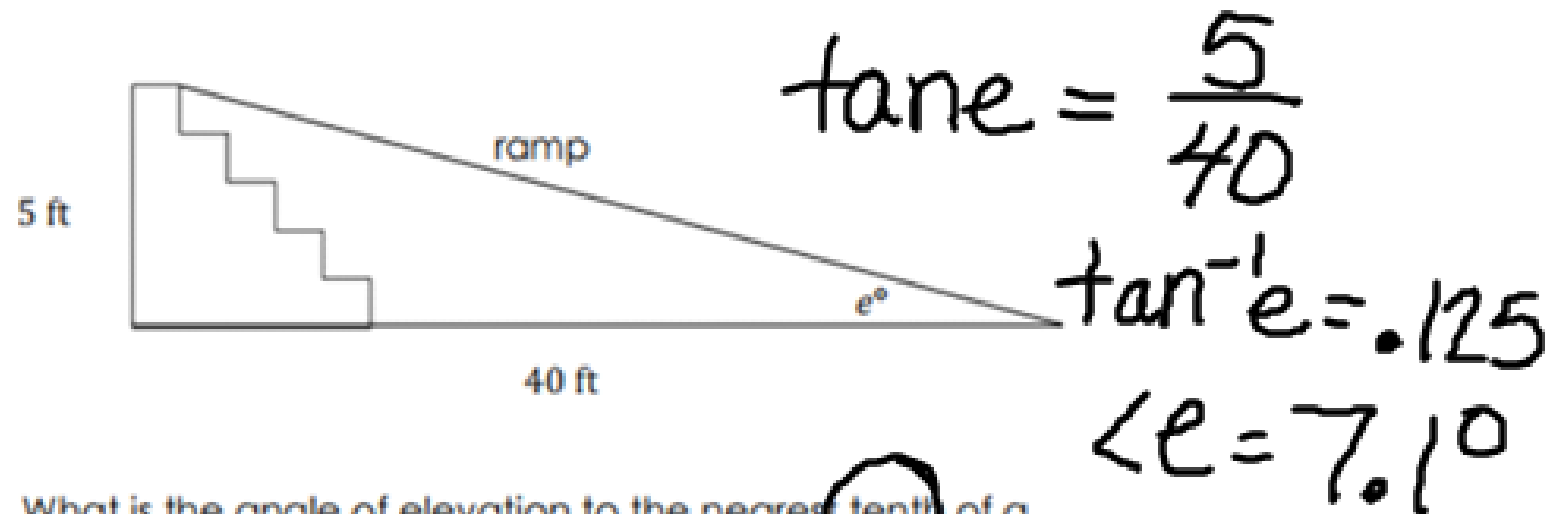


Yandel will place a ramp over a set of stairs at the backyard entrance so that one end is 5 feet off the ground. The other end is at a point that is a horizontal distance of 40 feet away, as shown in the diagram. The angle of elevation of the ramp is represented by e° .



$$\tan e = \frac{5}{40}$$

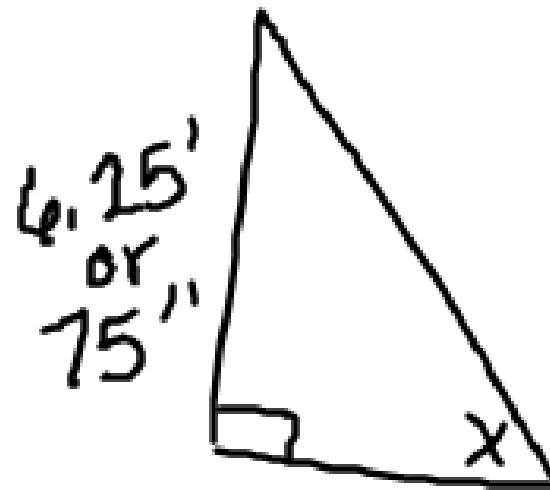
$$\tan^{-1} e = .125$$

$$\angle e = 7.1^\circ$$

What is the angle of elevation to the nearest tenth of a degree?

A man is 6 feet 3 inches tall. The tip of his shadow touches a fire hydrant that is 13 feet 6 inches away. What is the angle of elevation from the base of the fire hydrant to the top of the man's head? Round to the nearest tenth of a degree.

- A 24.8°
- B 34.5°
- C 42.6°
- D 65.2°



$$\tan x = \frac{6.25}{13.5}$$

or

$$\tan x = \frac{75}{162}$$

13.5' or 162"

$$\angle x = 24.8$$