Answer on Question #73107-Physics-Other

If you're looking out you're window which is 32 feet from the ground, and you're neighbors yard is 20 feet away, in which there is a 8ft fence, how many feet past the fence will you first see the ground?

Solution

Using proportions:

$$\frac{x}{8} = \frac{x + 20}{32}$$

$$32x = 8(x + 20)$$

$$32x = 8x + 160$$

$$24x = 160$$

$$x = \frac{160}{24} = \frac{20}{3} ft \approx 6.7 \; ft.$$

Answer: $\frac{20}{3} ft \approx 6.7 \; ft.$