

Student 5: Low Achieved
<small>NZQA</small> Intended for teacher use only

a)

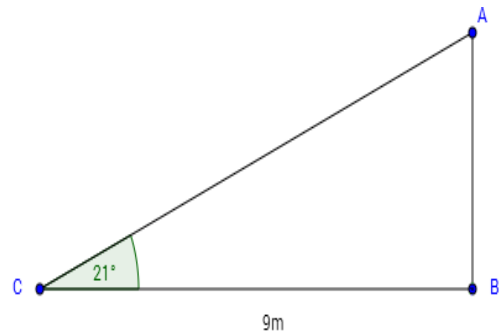
$$\tan 21 = \frac{x}{9}$$

$$\tan 21 \times 9 = x$$

$$x = 3.45$$

$$= 3.45$$

The height of the pole is 3.45m



1

b)

$$a^2 + b^2 = c^2$$

$$9^2 + 3.45^2 = c^2$$

$$c^2 = 92.903$$

$$c = 9.6m$$

$$= 9.6m$$

2

c)

$$\tan^{-1}\left(\frac{9}{2.1}\right)$$

$$= 76.9$$

$$= 76.9$$