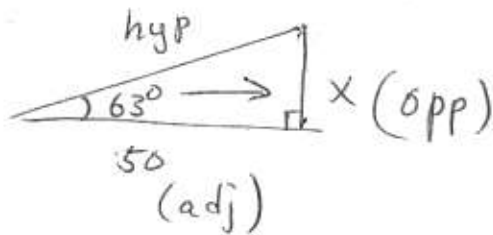
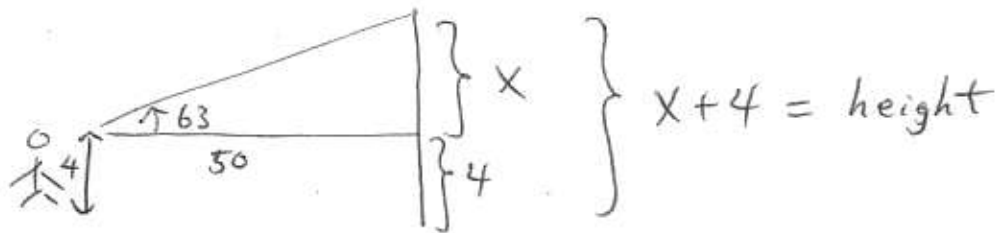


8



$$\tan 63 = \frac{\text{opp}}{\text{adj}}$$

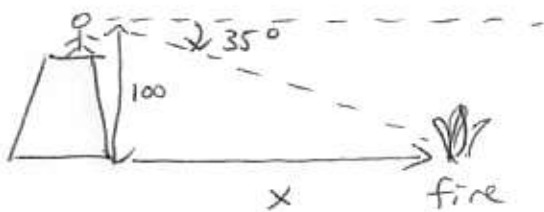
$$\tan 63 = \frac{x}{50}$$

$$x = 50 * \tan 63 = 98.1$$

S  
O  
H  
C  
A  
H  
T  
O  
A

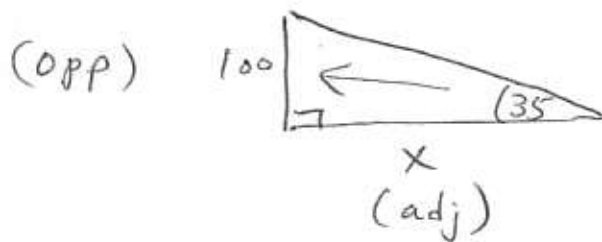
opp  
adj

9



By alternate interior angles theorem, the two angles below are congruent

So we can solve the following:



$$\tan 35 = \frac{\text{opp}}{\text{adj}}$$

$$\tan 35 = \frac{100}{x}$$

$$\frac{\tan 35}{1} = \frac{100}{x}$$

S  
O  
H  
C  
A  
H  
T  
O  
A

$$x * \tan 35 = 100 * 1$$

$$x = \frac{100}{\tan 35}$$