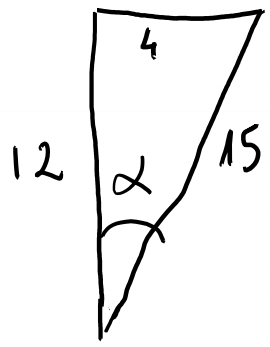
Ex 3

1)

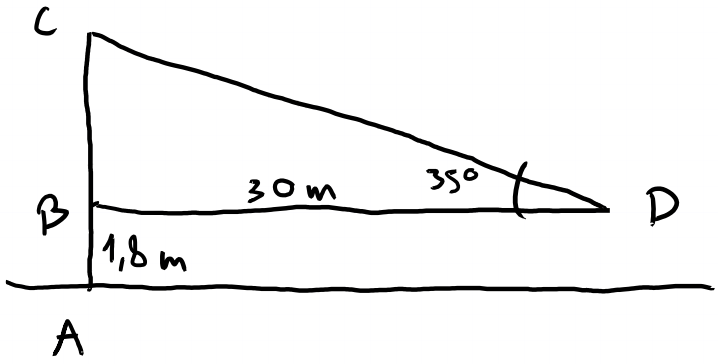


$\sin\alpha = \frac{4}{15}$

$\cos\alpha = \frac{12}{15} = \frac{4}{5}$

$\tan\alpha = \frac{4}{12} = \frac{1}{3}$

2)



$AC = AB + BC$; BC = opposé en $\hat{D}$

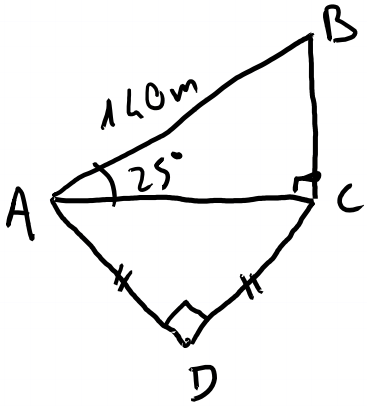
BD = adjacent en $\hat{D}$

Donc $\tan\hat{D} = \frac{BC}{BD} \Rightarrow BC = BD \times \tan\hat{D}$

$\Rightarrow BC = 30 \times \tan 35° \approx 21$ m

Alors $AC = 21 + 1,8 = 22,8$ m

3)



Le triangle ADC est rectangle et isocèle : $D\hat{A}C = D\hat{C}A = 45°$

$AC = 140 \times \cos 25° = 126,9$ m

$AD = 126,9 \times \cos 45° = 89,7$ m