

- 1a) A (6, 150°)  
B (2, 150°)  
C (5, 240°)

1b) 底 = (6-2) = 4

高 = 5

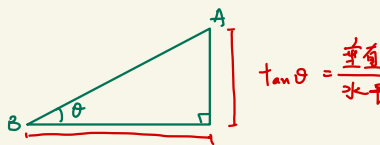
面積 =  $\frac{1}{2}(5)(4)$   
= 10

2. 斜率 = 1:30

$\frac{1}{30} = \frac{y}{1800}$

$y = \frac{1800}{30} = 60 \text{ m}^2$

3.



$\tan \theta = \frac{\text{垂直距離}}{\text{水平距離}} = \text{斜率}$  有印象?

a)  $\tan \theta = 0.06$

$0.06 = \frac{1}{n}$

$n = \frac{1}{0.06}$   
= 17

$\therefore \text{斜率} = \frac{1}{17}$

b)  $\theta = 5.2^\circ$

斜率 =  $\tan(5.2^\circ)$

= 0.091

$\tan(5.2^\circ) = \frac{1}{n}$

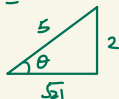
$0.091 = \frac{1}{n}$

$n = 11$

$\therefore \text{斜率} = \frac{1}{11}$

c)  $\sin \theta = 0.4 = \frac{4}{10} = \frac{2}{5}$

方法一



$\tan \theta = \frac{2}{5} = 0.436$

$\frac{1}{n} = 0.436$

$n = 2$

$\therefore \text{斜率} = \frac{1}{2}$

方法二

$\sin \theta = 0.4$

$\theta = \sin^{-1}(0.4)$

= 23.58

$\tan(23.58) = 0.436$

$n = 2$

$\therefore \text{斜率} = \frac{1}{2}$

6. PQ 斜率 =  $\frac{8}{25}$

QR 傾角 =  $16^\circ$

邊係路斜的?

- 對比 2 邊斜率, 斜率越大越斜

QR 斜率 =  $\tan 16^\circ = 0.2867$

PQ 斜率 =  $\frac{8}{25} = 0.32$

$\therefore \text{PQ 斜率} > \text{QR 斜率}$

$\therefore$  同意

7a

i) N18°E

ii) 031°

7b

i) S43°E

ii) 137°

7c

i) S(90-27)W

ii) 243°

= S63°W

7d

i) N(90-8°)W

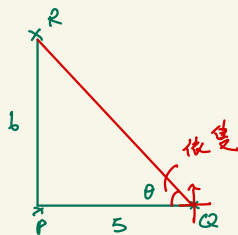
ii) 288°

= N72°W

8)

由 R 到 Q 的羅盤方向

$\Rightarrow$  係 Q 到的方向



$\tan \theta = \frac{b}{5}$

$\theta = 50.19$

$\therefore \text{羅盤方向} = \text{N}40^\circ \text{W}$

9)

文俊的速度 = 7.2 km/h

少杰的速度 = 9.6 km/h

4 小時後

文俊的距離 =  $7.2 \times 4$

= 28.8 km

少杰的距離 =  $9.6 \times 4$

= 38.4 km

