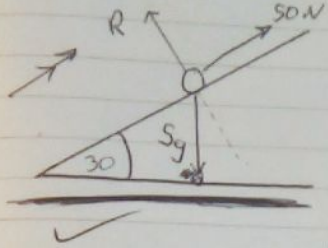


5B, 2, 4, 6, 7, 8

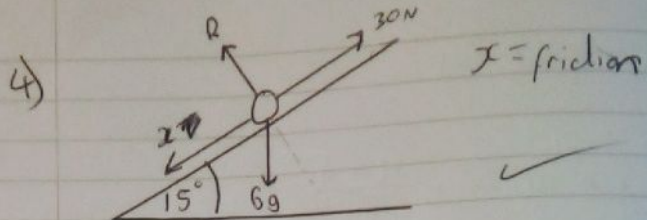
2)



para:  $50 - S_g \sin 30$   
 perp:  $R = S_g \cos 30$   
 $R = 42.44 \text{ (2dp)}$  ✓

✓

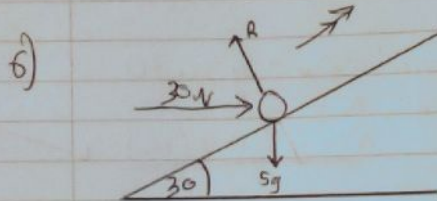
$F = ma$   
 $50 - S_g \sin 30 = S_g a$   
 $a = \frac{50 - S_g \sin 30}{S_g}$   
 $= \frac{50 - 49 \sin 30}{49}$   
 $= \frac{51}{98} = 0.52 \text{ X ?}$   
 $(5.1 \text{ ms}^{-2})$



$$30 = 20 + 6g \sin 15 - x$$

$$30 - 6g \sin 15 = x$$

$$x = \underline{\underline{14.8 \text{ N}}}$$



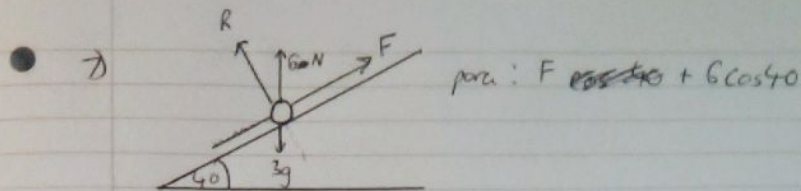
$$F = ma \rightarrow$$

$$30 - 5g \sin 30 = 5g a$$

$$\frac{30 - 5g \sin 30}{5g} = a$$

$$\underline{\underline{a = 2.80 \text{ m/s}^2}}$$

$$\underline{\underline{0.295 \text{ m/s}^2}}$$



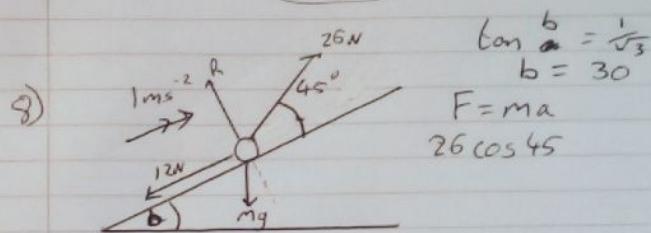
para:  $F \cos 40 + 6 \cos 40$

para:  $F + 6 \cos 40 = 3g \sin 40$

$F + 4.59 = 0.6427 \dots$

$F = 14.3 \times$

15.0 N



$\tan b = \frac{1}{\sqrt{3}}$

$b = 30$

$F = ma$

$26 \cos 45$

$26 \cos 45 - 12N - mg \sin b = mg \times a$

$26 \cos 45 - 12 - mg \sin 30 = mg \times 1$

$26 \cos 45 - 12 = mg + mg \sin 30$

$26 \cos 45 - 12 = mg (1 + \sin 30)$

$mg = \frac{26 \cos 45 - 12}{1 + \sin 30}$

$mg = 4.256 \times$

$R(\nearrow): 26 \cos 45 - mg \sin b - 12 = m \times 1$   
 $13\sqrt{2} - 12 = m + \frac{1}{2} mg$   
 $m = 1.08 \text{ kg}$   
 $= \frac{13\sqrt{2} - 12}{1 + g/2}$

How did they get  $\frac{1}{2} mg$