

Question 1

- a) meters (m)
- b) meters (m)
- c) meters per second (m/s)
- d) meters per second (m/s)
- e) meters per second per second (m/s^2)

Question 2

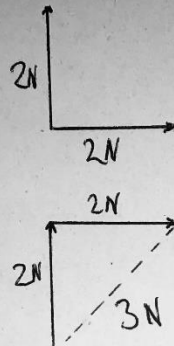
* Torque = Force x Radius

Newton meter (Nm)

Question 3

$$1 \text{ N} = 1 \text{ cm}$$

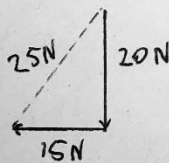
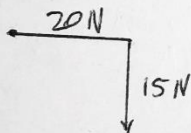
a)



$\therefore$ Resultant force = 5 N at a bearing of 45° ~~from north~~
FROM NORTH

$$1 \text{ cm} = 10 \text{ N}$$

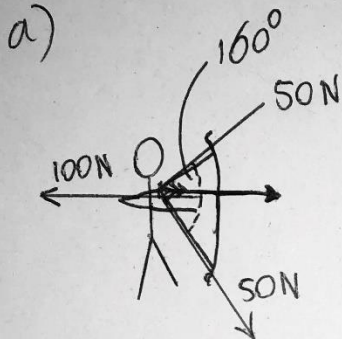
b)



$\therefore$ Resultant force = 25 N at a bearing of 220° ~~from north~~
FROM NORTH

$$180 + 40 = 220$$

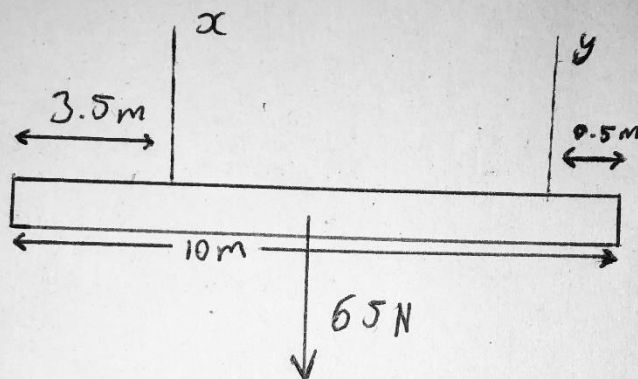
Question 4



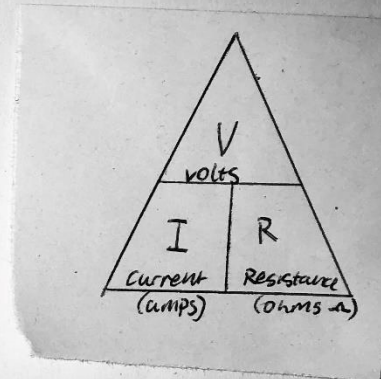
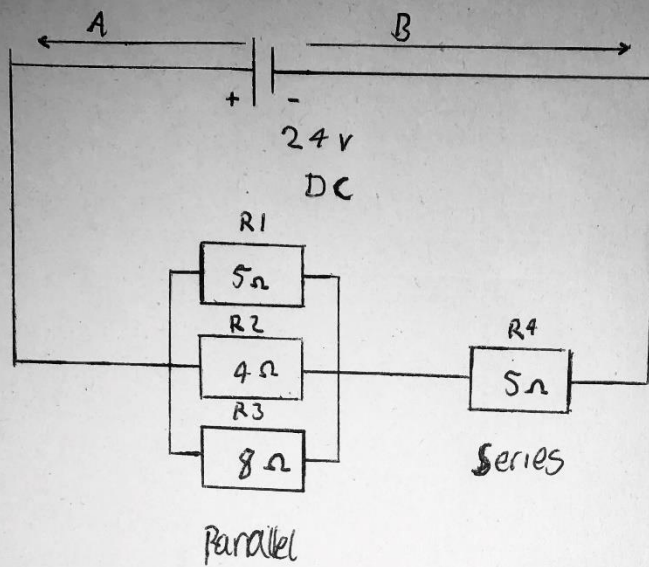
b) $100 \div 2$ (Left of string) = 50 N per half of string

c)

Question 5



Question 6



a) A Positive to negative

b) $5 + 4 + 8 + 5 = \boxed{22 \Omega}$

c) $I = V \div R$
 $I = 24 \div 22$
 $I = \boxed{1.09 \text{ A}}$

d)