AQA GCSE Physics Equations Recall Quiz

Paper 1 Topics 1 to 7

Equation Sheet Equations

energy = ½ x spring constant x extension^2

energy = mass x SHC x temp. change

energy = mass x latent heat

pressure x volume = constant

Write down the equation that links……

1

distance

force

work done

2

kinetic energy

mass

speed

3 gravitational field strength

gravitational potential energy

height

mass

4 energy transferred

power

time

5

power

time

work done

6

efficiency

total input

useful output

7

charge flow

current

time

8

current

potential difference

resistance

9

current

potential difference

power

10

current

power

resistance

11

charge flow

energy transferred

potential difference

12

density

mass

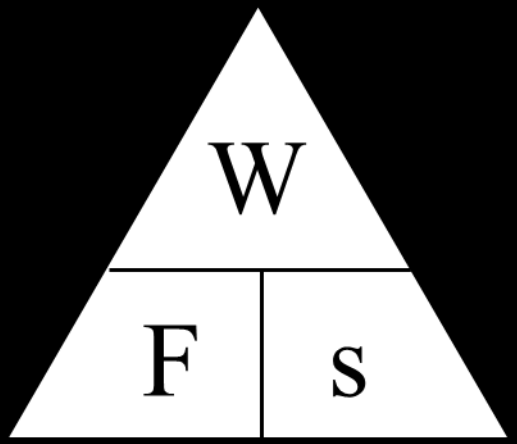
volume

Paper 1 Answers

1

distance
force
work done

work done = force x distance



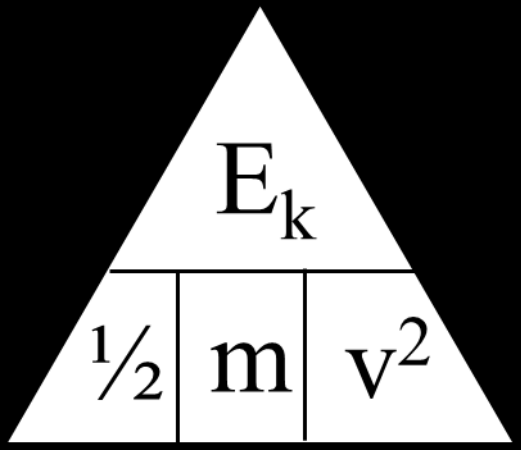
2

kinetic energy

mass

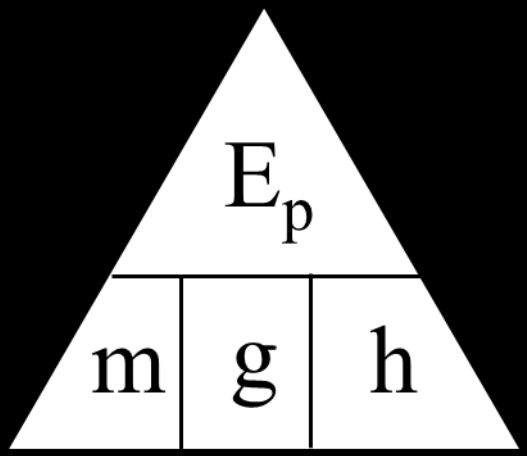
speed

kinetic energy = ½ x mass x speed^2



3 gravitational field strength
gravitational potential energy
height
mass

GPE = gravity x mass x height

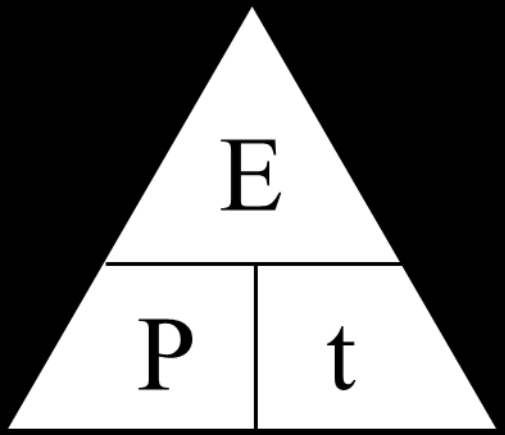


4 energy transferred

power

time

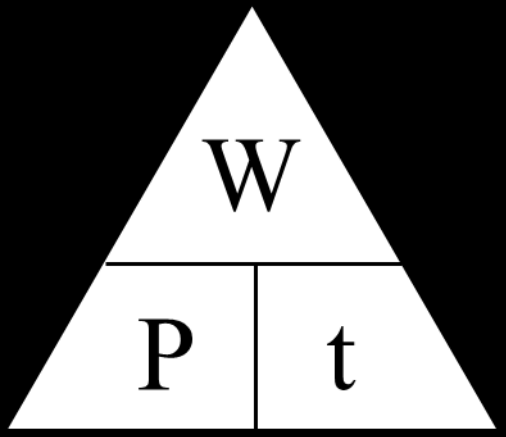
power = energy transferred / time



5

power
time
work done

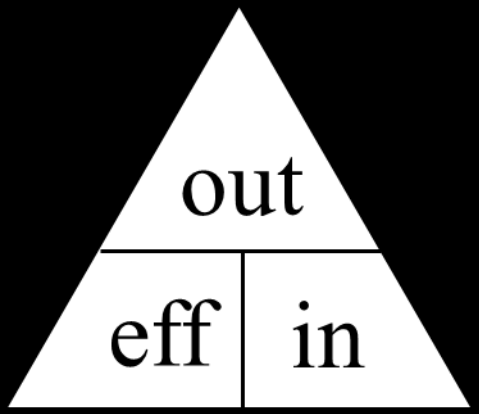
power = work done / time



6

efficiency
total input
useful output

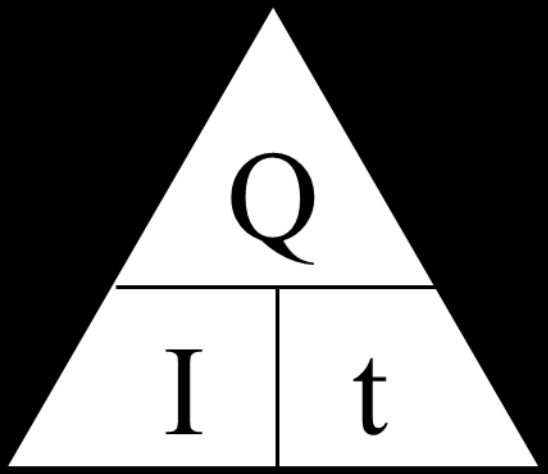
efficiency = useful output / total input



7

charge flow
current
time

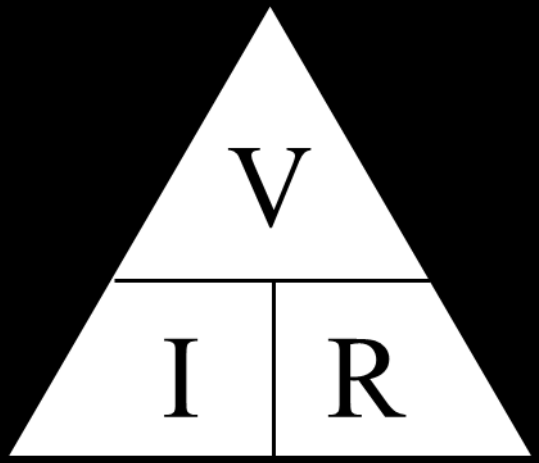
charge flow = current x time



8

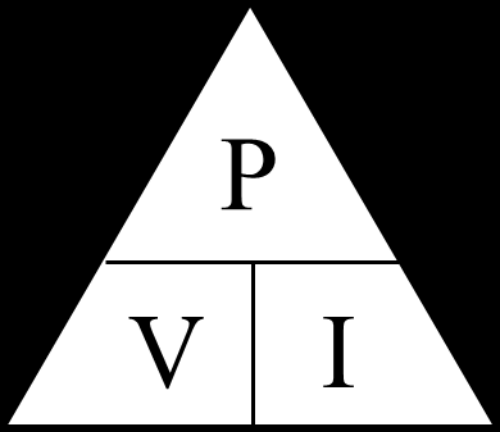
current
potential difference
resistance

potential difference = current x resistance



current
potential difference
power

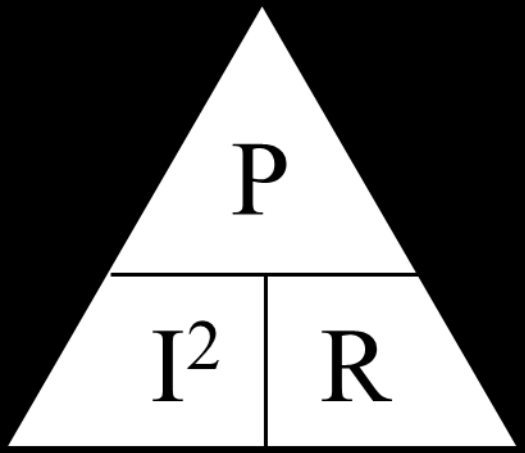
power = potential difference x current



10

current
power
resistance

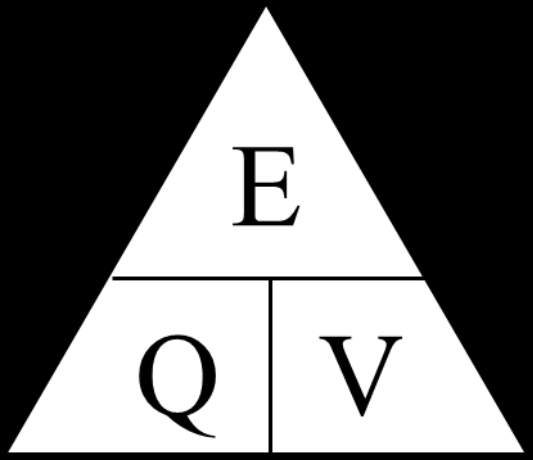
power = current^2 x resistance



11

charge flow
energy transferred
potential difference

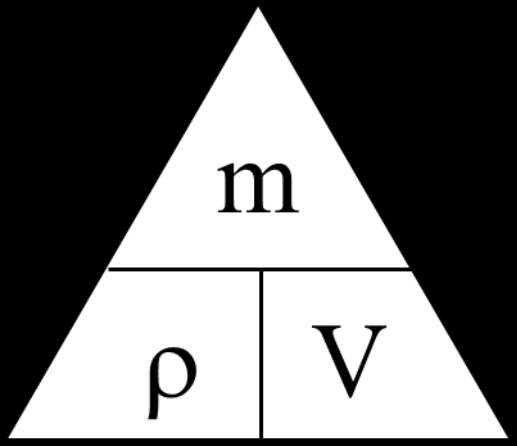
energy transferred = charge x p.d.



12

density
mass
volume

density = mass / volume



Paper 2

Topics 8 to 16

$v^2 - u^2 = 2 a s$

$F = m \Delta v / \Delta t$

$p = h \rho g$

$T = 1 / f$

$m = i / o$

$F = B I l$

$V_p / V_s = n_p / n_s$

$V_s I_s = V_p I_p$

Equation Sheet Equations

Write down the equation that links……

1

distance

force

moment

2

distance

speed

time

3

acceleration

change in velocity

time

4 gravitational field strength

mass

weight

5 extension (or compression)

force

spring constant

6

acceleration

force

mass

7

mass

momentum

velocity

8

area

force

pressure

9

frequency

wavelength

wave speed

Paper 2 Answers

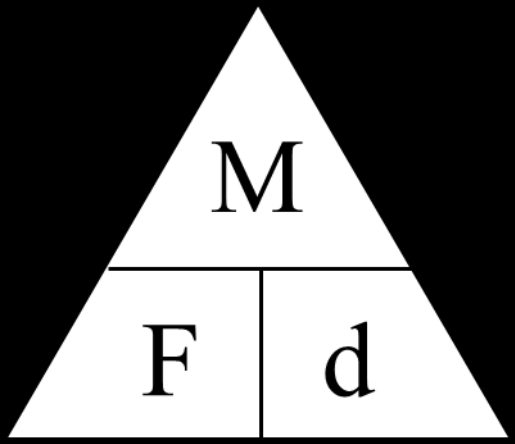
1

distance

force

moment

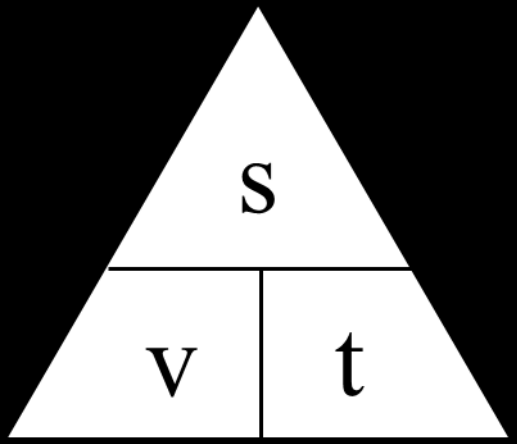
moment = force x distance



2

distance
speed
time

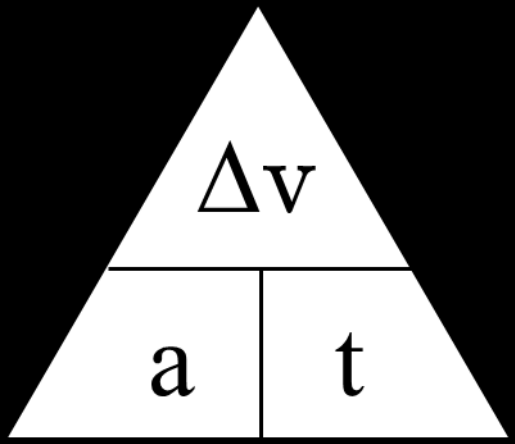
distance = speed x time



3

acceleration
change in velocity
time

acceleration = change in velocity / time

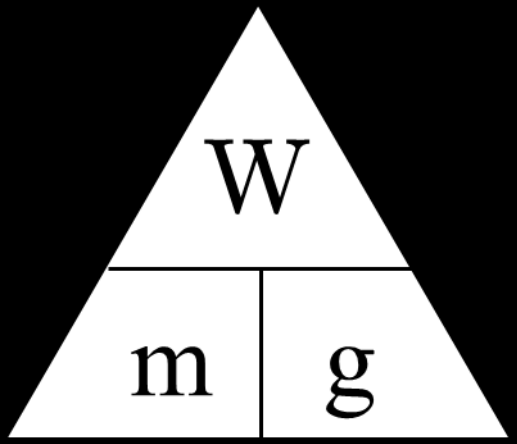


4 gravitational field strength

mass

weight

weight = mass x gravity

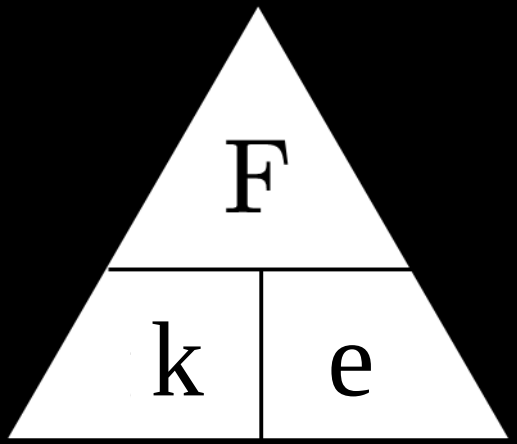


5 extension (or compression)

force

spring constant

force = spring constant x extension



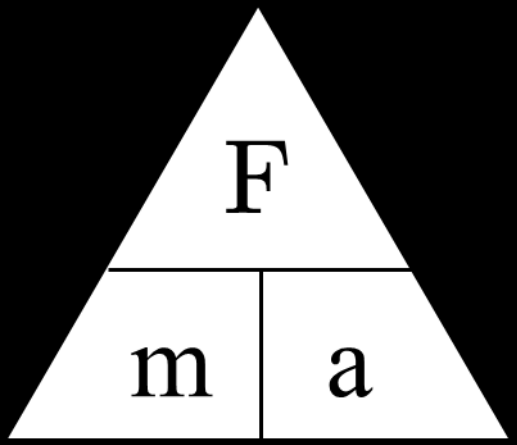
6

acceleration

force

mass

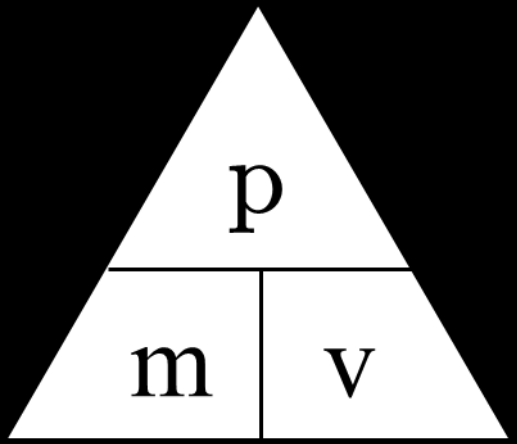
force = mass x acceleration



7

mass
momentum
velocity

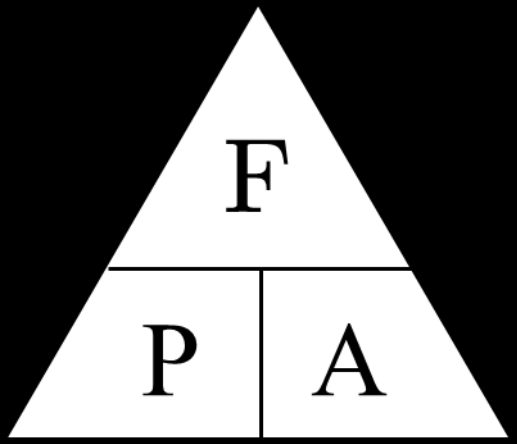
momentum = mass x velocity



8

area
force
pressure

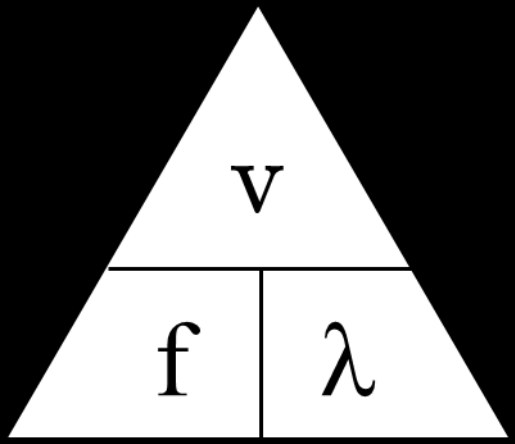
pressure = force / area



9

frequency
wavelength
wave speed

wave speed = frequency x wavelength



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