PHYSICS SKILLS REVISION PLACEMAT

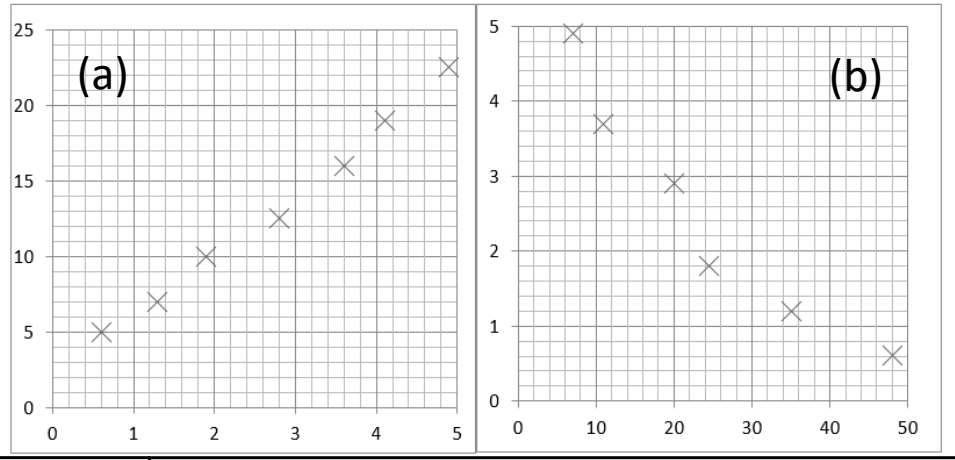
Convert the figures into the units required.

6 km	=	6×10^3	m
54 MN	=		N
0.086 μV	=		V
753 GPa	=		Pa
23.87 mm/s	=		m/s

Convert these figures to suitable prefixed units.

640	GV	=	640×10^9	V
		=	0.5×10^{-6}	A
		=	93.09×10^9	m
	kN	=	32×10^5	N
	nm	=	0.024×10^{-7}	m

Draw an appropriate line of best fit on each graph. Calculate the gradient of the line for graph (a). Estimate the gradient of graph (b) at x=20



Rearrange each equation into the subject shown in the middle column.

Equation		Rearrange Equation
$V = IR$	R	

Equation		Rearrange Equation
$v^2 = u^2 + 2as$	s	

Equation		Rearrange Equation
$pV = kT$	k	

Equation		Rearrange Equation
$p = h\rho g$	h	

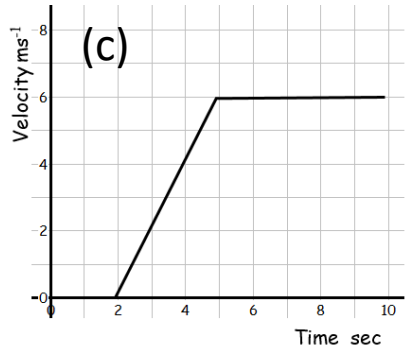
Describe the following types of error:

Random error –

Systematic error –

Zero error -

Calculate the area under graph (c)



Calculate the mean of the values below then write the answer to the appropriate number of significant figures

Value 1	Value 2	Value 3	Mean Value	Uncertainty
1	1	2		
435	299	357		
3.038	4.925	3.600		
0.00040	0.00039	0.00038		

In addition, state the uncertainty in each measurement.