Maths for Physics

 Value	What is it?	Expressed in standard form

## Maths for Physics Ì Basic skills

## 2. Expressing numbers to a specified number of significant figures

ALWAYS decimal format 3

ALL

• NO FRACTIONS -

• NO MULTIPLES of ,

RECURRI NG

Maths for Physics 1 Basic skills

Initial value	Change	%	Final value

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Calculation	Answer

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Angle in radians

7. Simple trigonometry.









# 8. Re-arranging formulae

### ESSENTI AL

Equation	Make this	Operation	Steps
	the subject	(to both	
		sides)	
			b = a - c
			c = b - a

Equation	Make this	Operation (to	Steps
	the subject	both sides)	
_			_
			—
			—

# Maths for Physics 1 Basic skills 9. Performing complex calculations on a calculator

## acceleration

# welocity m metres, not milli

#### <u>TABLE 11</u>

_	Equation	subject	Values
1	F=ma	m	$F = 4.00 \text{ kN}$ $a = 2.00 \text{ ms}^{-2}$
2	Q = W + Y	Y	$Q = 1.50 \text{ o } J \qquad W = 750 U J$
3	u=2 t	r	s = 56.0  cm
4	v = u + at	u	$v = 10.0 \text{ ms}^{-1}$ $a = 2.50 \text{ ms}^{-2}$ $t = 2.00 \text{ s}$
5	v = u + at	t	$v = 10.0 \text{ ms}^{-1}$ $u = 0.00 \text{ ms}^{-1}$ $a = 2.0 \text{ ms}^{-2}$
6	$I_o {=} I_{rms}  \varsigma  2$	I <sub>rms</sub>	$I_0 = 8.00 \ \mu A$
7	$s = ut + \frac{1}{2} at^2$	u	$s = 200 \text{ m}$ $a = 5.00 \text{ ms}^{-2}$ $t = 8.00 \text{ s}$
8	$E = \frac{1}{2} mv^2$	V	$E = 12.0 \text{ MJ}$ $m = 6.00 \text{ x} 10^4 \text{ kg}$
9	$\frac{E}{Q}$	Q	= 12.0  kV $E = 360  mJ$
10	$I  \frac{Q}{t}$	V	

# 11. ANSWERS

1. Expressing numbers in standard form.

 Value	What is it?	Expressed in standard form

Number

## Maths for Physics Ì Basic skills

#### 5. Prefixes used in Physics

Prefix value	Base unit value

Base unit value	Prefix value

6. Converting between units

Convert the following	Into this unit	Answer
		*

## Maths for Physics 1 Basic skills

- 9. Performing complex calculations on a calculator
- 10. Answering a question (putting all the skills together)

m=F/a	$m = 2.00 x 10^3 kg$