

Facts to Remember

Unit 1 $a^n = a \times a \times a \times \dots \times a$ (n times)

$$a^1 = a$$

$$a^0 = 1$$

$$a^n \times a^m = a^{n+m}$$

$$a^n \div a^m = a^{n-m}$$

$$(a^n)^m = a^{nm}$$

Standard form $A \times 10^n$ where $1 \leq A < 10$, n an integer.

} St / Ac

} Ac

} St / Ac

Unit 2 $(-a) \times b = -ab$

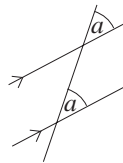
$$(-a) \times (-b) = ab$$

} St / Ac

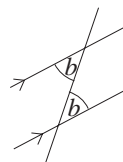
Unit 3 The sum of interior angles in a triangle is 180° .

The sum of interior angles in a quadrilateral is 360° .

Corresponding angles are equal,
shown as (a) in diagram.



Alternate angles are equal,
shown as (b) in diagram.



Supplementary angles add up to 180° ,
shown as (c) and (d) in diagram.



} St / Ac

Angle around a complete circle is 360° .

Angle around a point on a straight line is 180° .

Bearings { are always measured clockwise from North.
 { are expressed as 3 digits.

The angle on the perimeter subtended from a diameter
of a circle is 90° .

} Ac

- Unit 4** Pythagoras' Theorem: $a^2 + b^2 = c^2$
- $\sin x = \frac{\text{opp}}{\text{hyp}}$, $\cos x = \frac{\text{adj}}{\text{hyp}}$, $\tan x = \frac{\text{opp}}{\text{adj}}$ } St / Ac
- Unit 5** Sum of all probabilities = 1.
- $p(\text{event occurring}) + p(\text{event not occurring}) = 1.$
- If there are n equally likely outcomes,
then $p(\text{particular outcome}) = \frac{1}{n}.$ } St / Ac
- If events A and B are independent,
 $p(\text{A and B}) = p(\text{A}) \times p(\text{B}).$
- If events A and B are mutually exclusive,
 $p(\text{A or B}) = p(\text{A}) + p(\text{B}).$ } Ac
- Unit 6** Multiplying by 10 moves the decimal point one to the right.
Dividing by 10 moves the decimal point one to the left. } St / Ac