# STUDENT REFERENCE

CLARIFICATION OF TERMS

For the purposes of the Principles of Mathematics 10 examination, the following terms have been clarified.
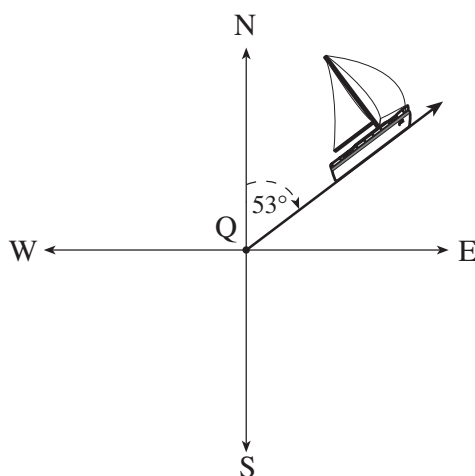
Bearing: Direction can be expressed using bearing which is the measurement of an angle from due north in a clockwise direction. Direction can alternately be expressed using compass directions, like N20°W.

Examples:
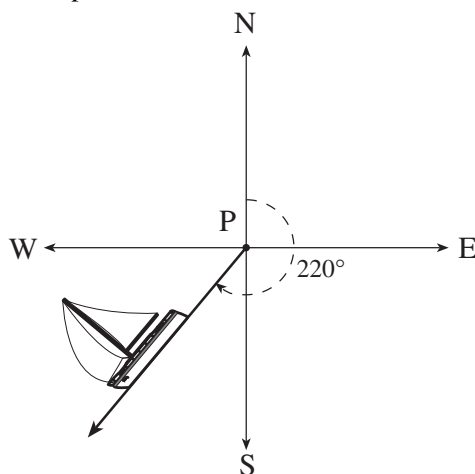
This boat leaves port P on a bearing of 220° or alternatively, travelling S40°W

This boat leaves port Q on a bearing of 53° or alternatively, travelling N53°E

PST/GST: For provincial examination purposes, **PST/GST** rates do not necessarily reflect current provincial or federal tax rates. For example: **PST** should not be assumed to be 7% nor **GST** to be 7%.

Restrictive: The most **restrictive** classification of a number gives the smallest subset of Real Numbers to which this number belongs.

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$$M = \left(\frac{x_1 + x_2}{2},\ \frac{y_1 + y_2}{2}\right)$$

$$t_n = a + (n-1)d$$

$$t_n = ar^{n-1}$$

$$S_n = \frac{n}{2}(a + t_n)$$

$$S_n = \frac{n}{2}[2a + (n-1)d]$$

Volume of pyramid:	$= \frac{1}{3}(\text{Base Area})(h)$
Volume of prism:	$= (\text{Base Area})(h)$
Volume of a cylinder:	$= \pi r^2 h$
Surface area of a cylinder:	$= 2\pi r^2 + 2\pi rh$
Volume of a cone:	$= \frac{1}{3}\pi r^2 h$
Surface area of a cone:	$= \pi r^2 + \pi rs$
Volume of a sphere:	$= \frac{4}{3}\pi r^3$
Surface area of a sphere:	$= 4\pi r^2$

NOTE: Use the value of π programmed in your calculator rather than the approximation of 3.14.

$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

$$a^2 = b^2 + c^2 - 2bc \cos A$$