

STUDENT REFERENCE

When answering **Numerical-Response** questions, please note the following:

- Find the correct question number on the Response Form and write your answer in the spaces provided, noting proper place value. **Only one digit per box.**
- PRINT your digits **as shown below**. Keep within the box provided.



- Negative answers must include a shaded negative circle. If neither circle is bubbled, the answer will be read as positive.
- Leave unused boxes blank.
- For example, the answer **-89.9** will be written as shown.



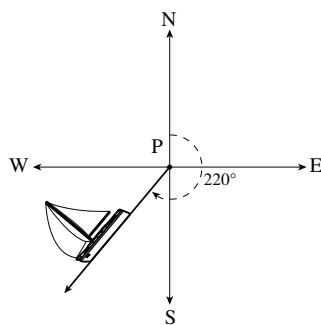
CLARIFICATION OF TERMS

For the purposes of the Principles of Mathematics 10 examination, the following terms have been clarified.

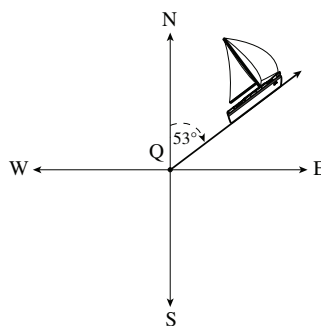
Bearing:

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 $N20^\circ W$.

Examples:



This boat leaves port P on a bearing of 220° or alternatively, travelling $S40^\circ W$



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

FORMULAE — PRINCIPLES OF MATHEMATICS 10

$$\text{Area of a triangle:} = \frac{bh}{2}$$

$$\text{Circumference of a circle:} = 2\pi r$$

$$\text{Area of a circle:} = \pi r^2$$

$$\text{Volume of rectangular prism:} = lwh$$

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

$$c^2 = a^2 + b^2$$

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

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

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

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

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

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

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

$$c^2 = a^2 + b^2 - 2ab \cos C$$