## Trigonometric Formulae

N5 Applications HW

## Calculators should be used and all answers rounded to 1 dp

## Unit level:

1. Calculate the area of triangle PQR

2. Two yachts leave from Harbour H .

Yacht A sails on a bearing of $072^{\circ}$ for 30 km .
Yacht B sails on a bearing of $140^{\circ}$ for 50 km . How far apart are the yachts at this point?
2. Calculate the distance from H to B .



## Assessment level:

4. Triangle $D E F$ is shown below. Calculate the size of $\angle E D F$

5. From Brunton, the bearing of Carlton is $153^{\circ}$ From Appleton, the bearing of Carlton is $065^{\circ}$

Calculate the distance from Brunton to Carlton.

6. If $\sin x^{\circ}=\frac{4}{5}$ and $\cos x^{\circ}=\frac{3}{5}$, find the value of $\tan x^{\circ}$
7. The area of triangle $A B C$ is $38 \mathrm{~cm}^{2}$. Find the size of Angle $B$.

8. The diagram shows two blocks of flats of equal height.


Calculate the height, $h$, in metres.
9. A garden, in the shape of a quadrilateral, is represented in the diagram below.

(a) Calculate the length of the diagonal BD.
(b) Calculate the area of the garden.

