

National 5 Final Exam Practice

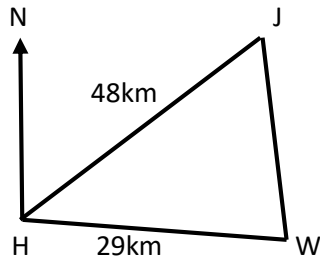
Trigonometric Skills

Using Bearings with Trigonometry

Average Allocation

4 Marks

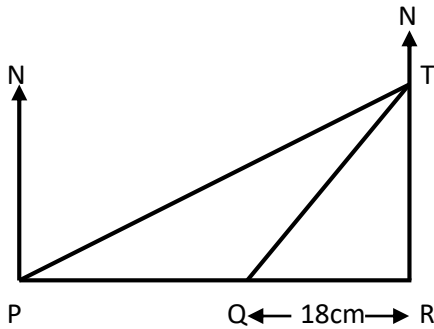
1. In the diagram below, H represents a harbour for boats. J and W represent Jarvis Bay and Watson Bay.



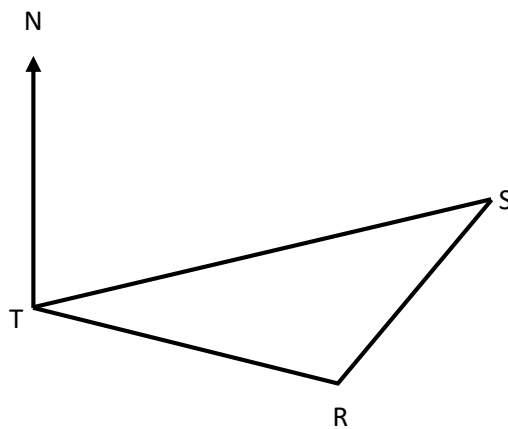
From the harbour, Jarvis Bay is 48km away and on a bearing of 055° .
Also from the harbour, Watson Bay is 29km away and on a bearing of 093° .

Calculate the direct distance between Jarvis Bay and Watson Bay.

2. In the diagram below, T is on a bearing of 070° from P, R is due East of P and angle SQR is 61° .
If $QR = 18\text{cm}$, calculate the length of PT.



3. The diagram shows Sarah (S) standing 350m from Tom (T) on a bearing of 085° .
Also shown is Rachael (R), standing 280m from Tom on a bearing of 115° .



- Calculate the distance between Rachael and Sarah.
- Calculate the size of angle TRS.
- Hence, calculate the bearing of Sarah from Rachael.