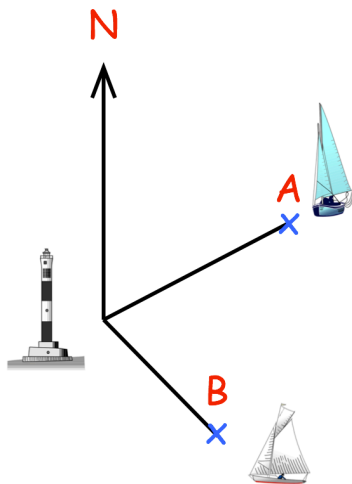


Shown is the curve
 $y = 3\sin x$

Write down the coordinates of A and B

$$x^2 < 16 \quad \text{and} \quad x + 4y = 10$$

Work out the range of possible values of y .



Boat A is 28km from a lighthouse on a bearing of 053°

Boat B is 19km from the same lighthouse on a bearing of 164°

Calculate the distance between the two boats.

Solve

$$\frac{81^{2-x}}{27^{2x+3}} = 3$$