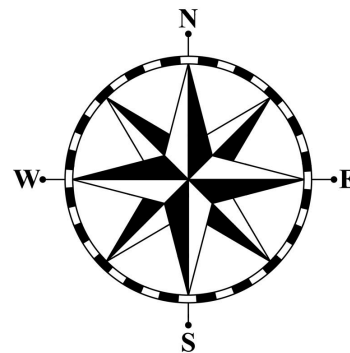


# YEAR 10 MATH:

## TRUE AND COMPASS BEARINGS



The two types of bearings you may be asked to use in the Year 10 Math course are COMPASS and TRUE

### COMPASS BEARINGS

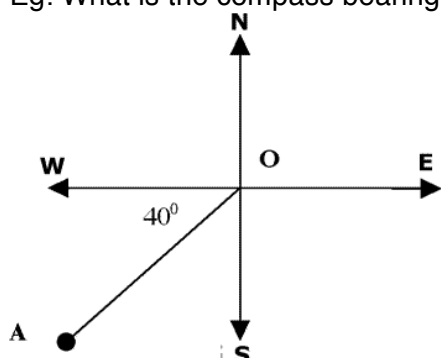
To answer these questions we start in the middle of your compass and use the saying "Look, Turn, Towards"

Look is always either N or S.

Turn is always less than  $90^\circ$ .

Towards is always either E or W.

Eg: What is the compass bearing from O to A?



Look = S (because it's closest)

Turn =  $50^\circ$  (because  $90 - 40 = 50$ )

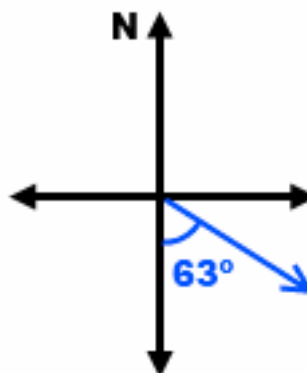
Towards = W (that's the direction we turn from S)

So the answer is S  $50^\circ$  W.

### TRUE BEARINGS

True bearings are how many degrees you need to turn in a clockwise direction if you start in the middle of the compass looking North.

Eg: What is the true bearing of arrow shown?



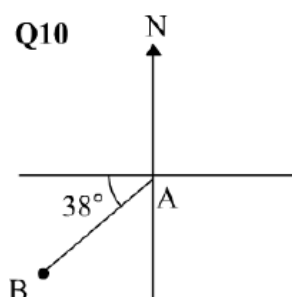
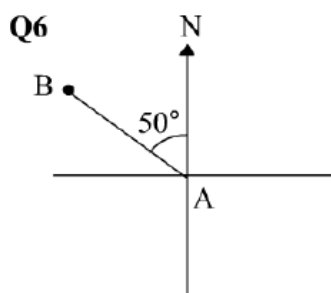
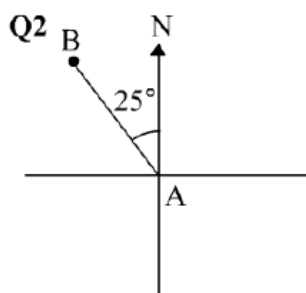
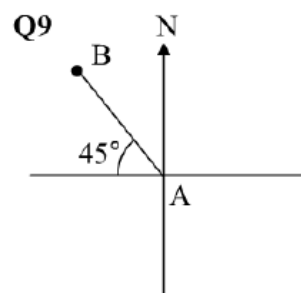
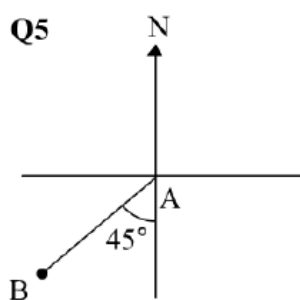
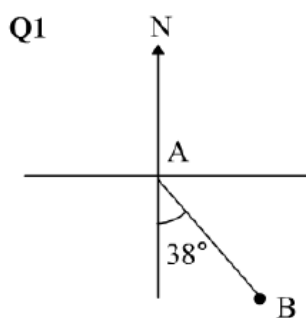
Start looking North.

Turn  $90^\circ$  to look east.

Then another  $27^\circ$  (because  $90 - 63 = 27$ )

So the answer is  $90 + 27 = 117^\circ\text{T}$

Attempt these examples. Write both the Compass and True bearing for each.



For more revision questions see Exercise 5.5 in your textbook.