Name:..... Class:..... Date:.....

Measuring angles

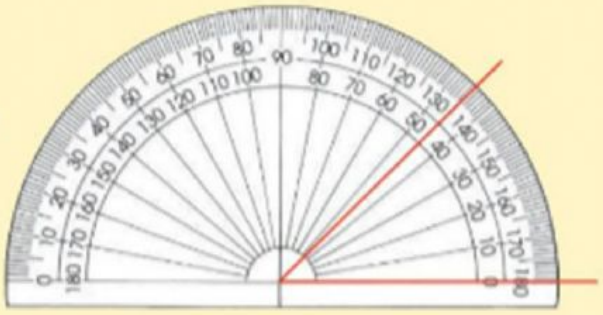
We use a protractor to measure the size of an angle.
A protractor has a clockwise and an anti-clockwise scale. This is so that you can measure angles to the left or right.

It is a good idea to estimate the angle first and then measure it.

Place the cross at the point of the angle you are measuring.

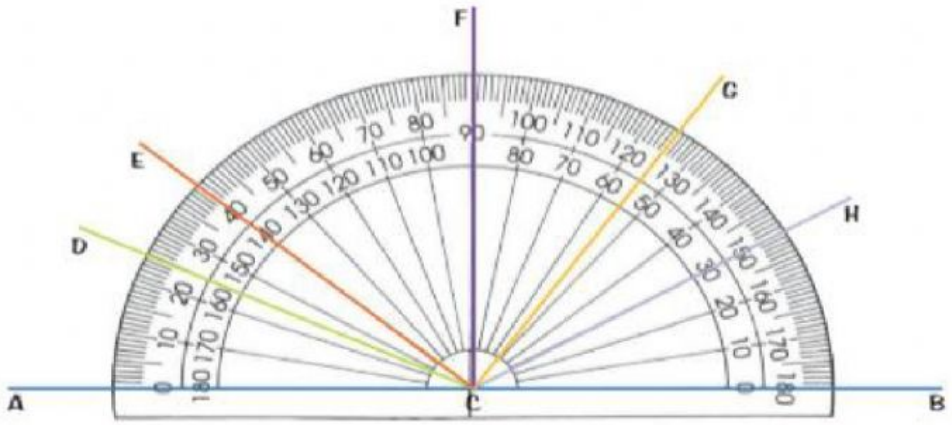
Line up one arm of the angle with the base line at 0°.

Read around from the 0° on the scale until you reach the second line.



This angle is 45°.

1 Write the angles for each of these.



a) ∠BCD = ☐° b) ∠BCE = ☐° c) ∠BCF = ☐°

d) ∠BCG = ☐° e) ∠BCH = ☐° f) ∠ACG = ☐°

g) ∠ACD = ☐° h) ∠ACH = ☐° i) ∠ACF = ☐°

Drawing angles

Before using a protractor to draw an angle, picture what you think the angle will look like. You could draw a sketch to help.

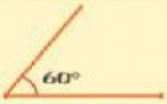
To draw an angle of 60°:

1 Draw a single base line.

2 Line up the protractor so that the centre is at one end, whichever one you wish to be the vertex of the angle.

3 Mark off the angle.

4 Draw a line to show 60°.



1 Without using a protractor, draw angles which you estimate to be:
a) 50° b) 75° c) 15° d) 120° e) 150°

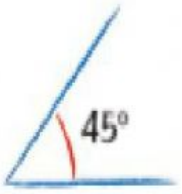
2 Measure each angle from question 1 with your protractor. Write how much you overestimated or underestimated each angle by.

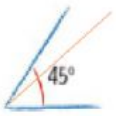
Finished Ex1,Ex2 in class.

3 Here are some sketches of some angles. Draw them accurately using a protractor.

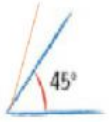
Choose the correct answer.

a)



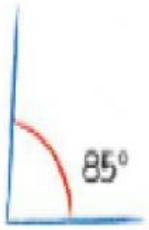


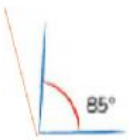
A



B

b)





A

B

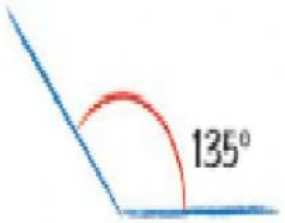
c)

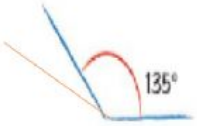
A

B

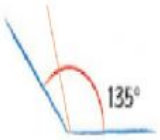
Choose the correct answer.

d)



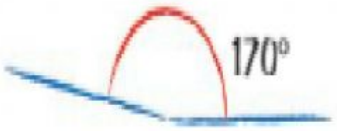


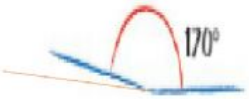
A



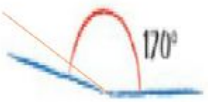
B

e)





A



B