

Lesson 73 **MIXED****Constructing angles with a protractor**

WHAT THIS LESSON TEACHES

To construct an angle with a protractor, first rule a straight baseline and mark the vertex at one end. Place the protractor on the vertex, count from zero to the required degrees, mark the dot, then join it to the vertex.

→ Rule a 6 cm line and mark a dot at the left end for the vertex.

→ For 60 degrees, follow the scale up to 60 and mark a dot at 60.

MODEL THIS ON THE BOARD

CONSTRUCT A 90 DEGREE ANGLE

- 1 Rule a straight baseline and mark the vertex at the left end.
- 2 Place the protractor so the centre is on the vertex and the baseline aligns with zero.
- 3 Count from zero up to 90 and mark a dot at that point on the scale.
- 4 Join the vertex to the 90 degree dot with a ruler.

ANSWER KEY

Scaffold: visual check on the page

Q1: (drawing of 30° angle)

Q2: 40° angle (drawing)

Q3: 60° angle (construction)

Q4: 90°

Q5: 110° angle (constructed)

Q6: 135°

a) Always — The rule says the starting straight line is drawn first.

b) Always — The method always counts up from zero to the size.

c) Never — If done correctly it will always measure 90 degrees.

d) Always — The final step is always to join the vertex to the dot.

EXTENSION SHEET · STRETCH ANSWERS

S1: 307° is reflex

S2: 126° is obtuse

S3: 136°

S4: 47° is acute

S5: 69°