Skillsheet 14-01

Measuring angles

To measure angles we use a **protractor** marked in **degrees**. There are 360 degrees in one full turn. 360 degrees is written as 360°.

Example

1 Measure $\angle FGT$ and $\angle BCR$ in the figures below.

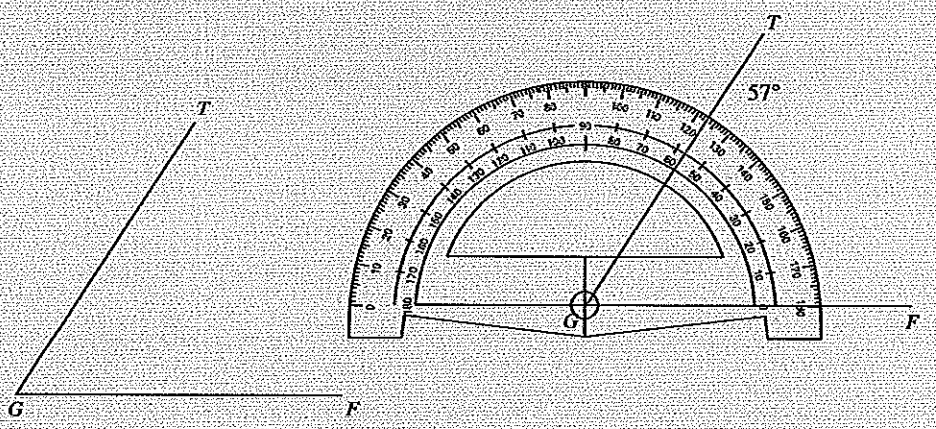
Solution

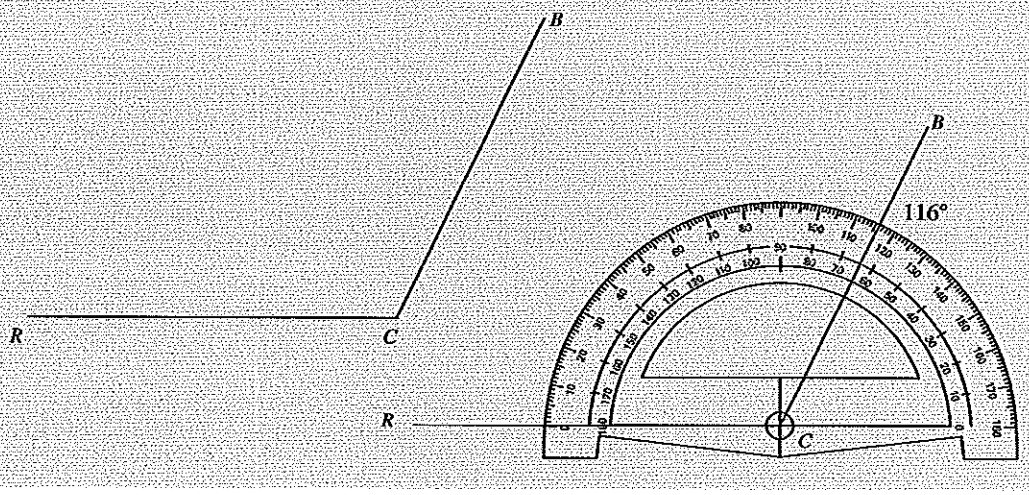
The steps are as follows:

1 Place the protractor over the angle. Put the vertex (the point of the angle) in the middle of the protractor. Make sure one arm of the angle is under the bottom line marked on the protractor.

2 Use the scale that has the zero over the arm you have lined up with. For $\angle FGT$ it is the inside scale, and for $\angle BCR$ it is the outside scale.

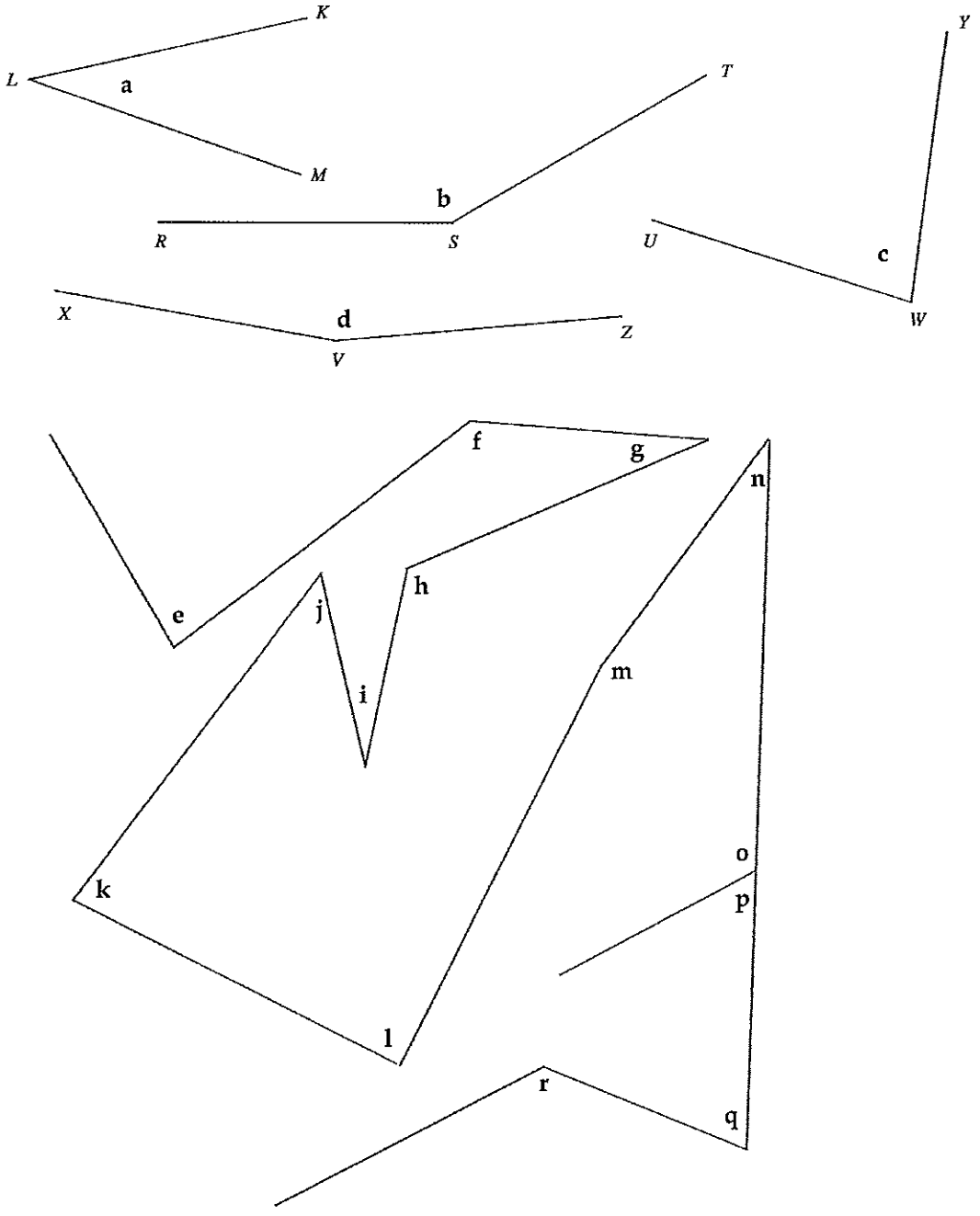
3 Read the number off the scale where the second arm is positioned. $\angle FGT = 57°$ and $\angle BCR = 116°$.





Exercises

1 Measure these angles.



Drawing angles

To draw an angle we follow a similar procedure to measuring angles. The steps are as follows:

1 Draw a line segment to form one arm of the angle.

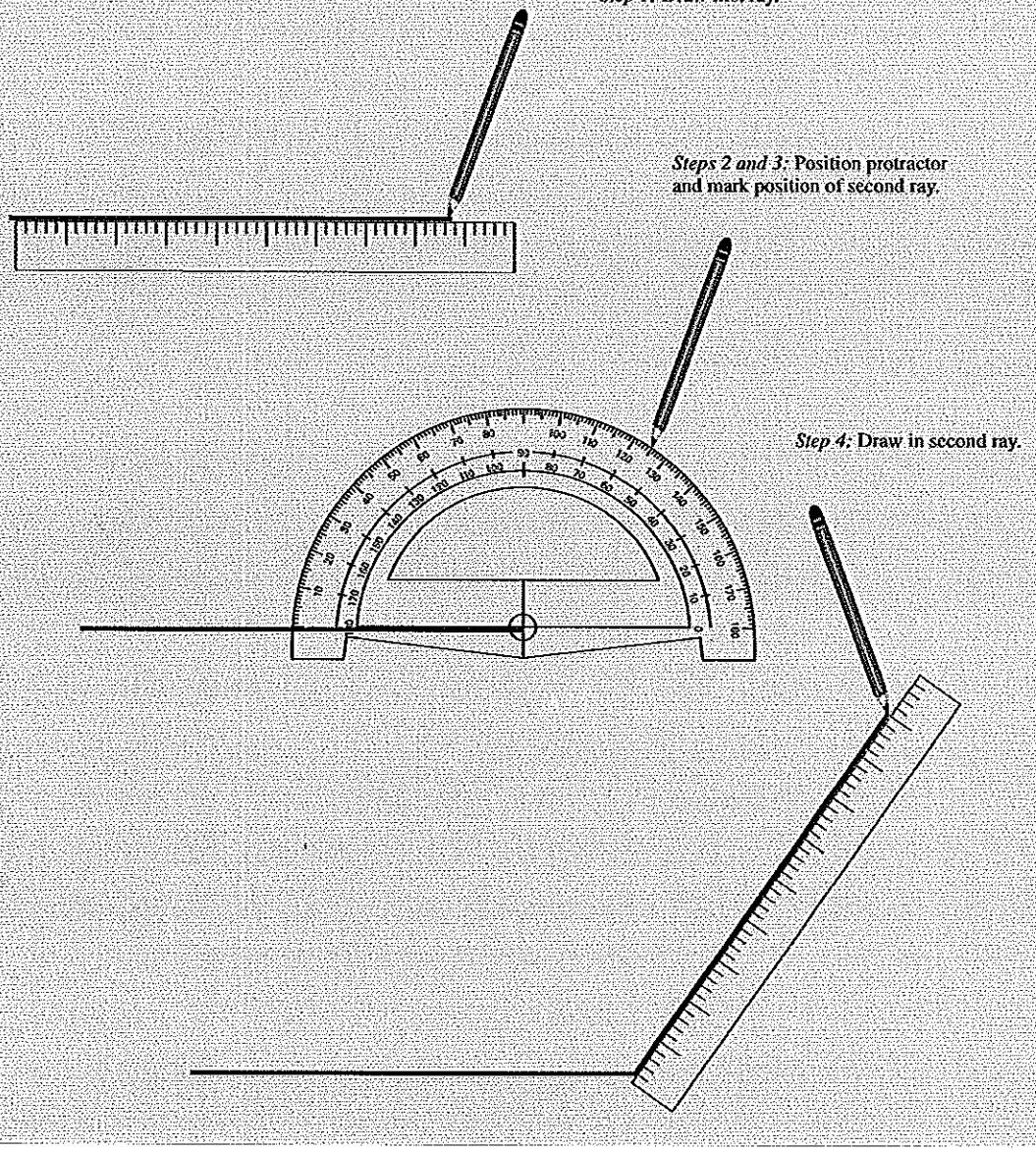
2 Place the protractor on the line segment with the centre where the vertex will be and the bottom line along the line segment.

3 Use the appropriate scale to mark the position of the other arm.

4 Remove the protractor and draw in a segment to show the other arm of the angle.

Example

2 Draw an angle of 125°.



Exercises

2 Draw angles measuring:

a 60°	**b** 110°	**c** 90°	**d** 45°	**e** 120°
f 135°	**g** 15°	**h** 72°	**i** 68°	**j** 137°
k 33°	**l** 121°	**m** 84°	**n** 166°	**o** 29°

Answers

1 **a** 32° **b** 150° **c** 80° **d** 165° **e** 83° **f** 138°
g 28° **h** 125° **i** 25° **j** 50° **k** 80° **l** 90°
m 170° **n** 35° **o** 120° **p** 60° **q** 70° **r** 130°

2 Teacher to check.