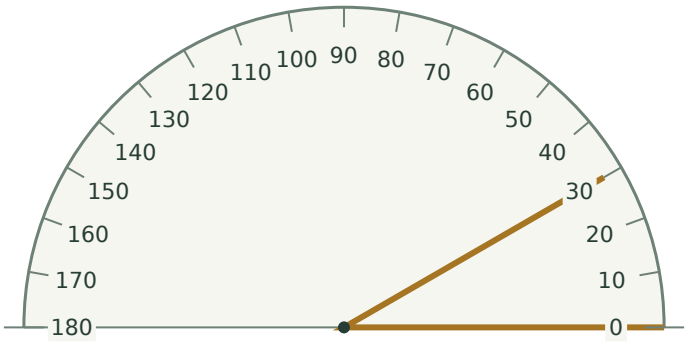
# Using a protractor

6 questions | 9 marks

Equivalent correct methods earn the corresponding marks.

**1.** Read this angle. [1 mark]

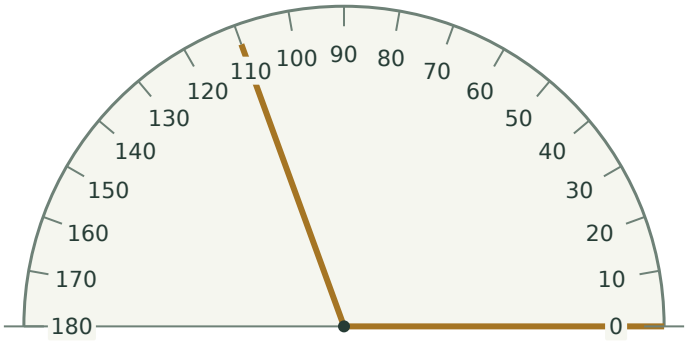



Start at the baseline ray.

Use the right baseline zero and read 30.

**Answer:** 30 degrees

**2.** Read this angle. [1 mark]

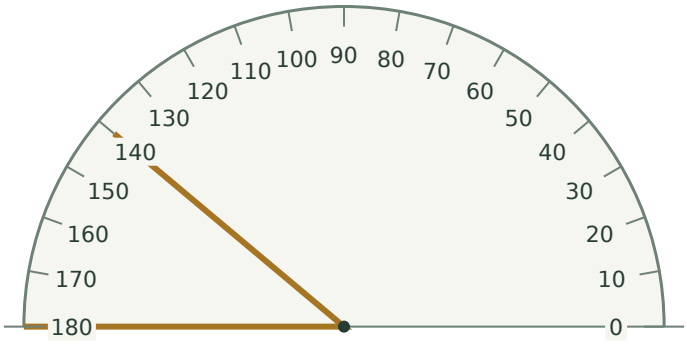



Start at the baseline ray.

Use the right baseline zero and read 110.

**Answer:** 110 degrees

**3.** Read from the left baseline. [2 marks]




Start at the baseline ray.

The ray reads 140 from the right; 180 − 140 = 40.

**Answer:** 40 degrees

**4.** A ray is halfway between 70 and 80 degrees on the correct scale. Find the angle. [1 mark]

Halfway between 70 and 80 is 75.

**Answer:** 75 degrees

**5.** A learner puts the protractor edge at the vertex but not its centre. Explain the problem. [2 marks]

The centre mark must match the vertex, not an arbitrary edge.

**Answer:** The reading may be wrong.

**6.** An acute angle gives readings 50 and 130 on the two scales. Which is reasonable? Explain. [2 marks]

Acute means less than 90, whereas 130 is obtuse.

**Answer:** 50 degrees