

# Unit 13

## Strengthen activities

**MISCONCEPTION:** Children may find the protractor difficult to use if the angle is not presented with a horizontal 'base'. They may struggle to see which scale to use when measuring a given angle.

### Answers

Assessment checkpoint:

Answers will vary. Check they have used protractor correctly.

**MISCONCEPTION:** Children may find the complementary angles to  $200^\circ$  rather than  $180^\circ$  when calculating angles on a straight line.

### Answers

Assessment checkpoint:

$a = 140^\circ$ ,  $b = 105^\circ$ ,  $c = 10^\circ$

Ensure children subtract the known angle from 180.

**MISCONCEPTION:** Children may try to spot lengths or angles that look the same rather than using reasoning based on properties.

### Answers

See practice book answers

## Deepen activities

### Answers

#### Activity 1

Answers will vary and may include:

- They are two congruent triangles.
- They are both right-angled triangles.
- The internal angles of each triangle will be  $60^\circ$ ,  $90^\circ$  and  $30^\circ$ .
- Each triangle has one right angle and two acute angles.

#### Activity 2

It is always true.

#### Activity 3

- The other child would need to turn  $270^\circ$  anticlockwise to face the same direction.
- A general rule should identify that the anticlockwise degree of turn is  $360^\circ$  subtract the clockwise degree of turn. E.g.  $45^\circ$  clockwise =  $315^\circ$  anticlockwise, because  $360 - 45 = 315$ .