

Varied Fluency

Step 3: Calculate Angles

National Curriculum Objectives:

Mathematics Year 6: (6G4b) [Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles](#)

Differentiation:

Developing Questions to support calculating right angles and angles on a straight line; one missing angle to calculate. Angles given in multiples of 10.

Expected Questions to support calculating right angles, angles on a straight line and angles around a point; up to two missing angles to calculate. Angles given in multiples of 5.

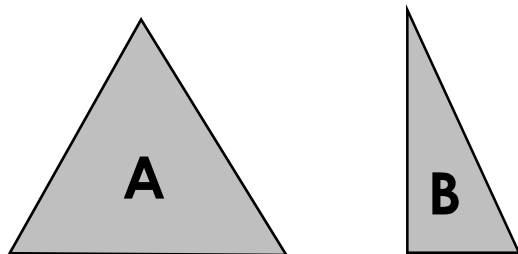
Greater Depth Questions to support calculating right angles, angles on a straight line and angles around a point; two or more missing angles to calculate. Angles given in one degree increments.

More [Year 6 Properties of Shapes](#) resources.

Did you like this resource? Don't forget to [review](#) it on our website.

Calculate Angles

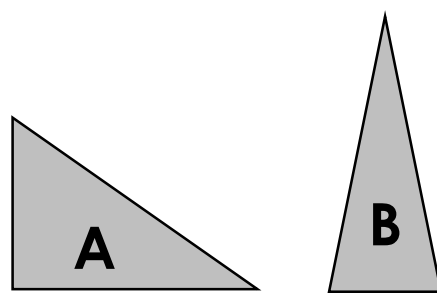
1a. Identify the triangle which has a right angle.



VF

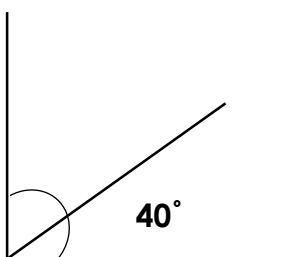
Calculate Angles

1b. Identify the triangle which has a right angle.



VF

2a. What is the missing angle?



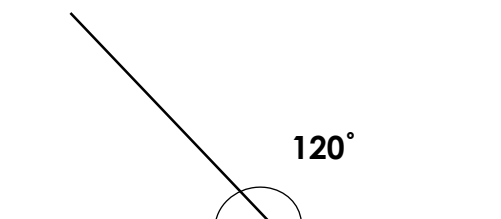
VF

2b. What is the missing angle?



VF

3a. What is the missing angle?



VF

3b. What is the missing angle?



VF

4a. True or false?

70° and 30° is equal to a right angle.



VF

4b. True or false?

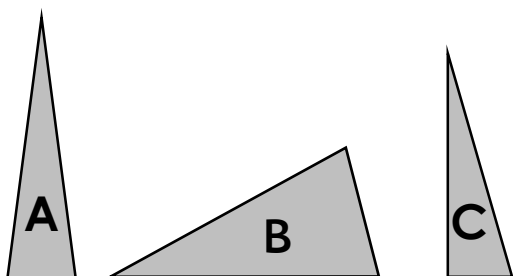
110° and 70° is equal to a straight line.



VF

Calculate Angles

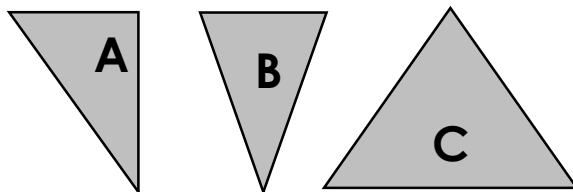
5a. Identify the triangle which has a right angle.



VF

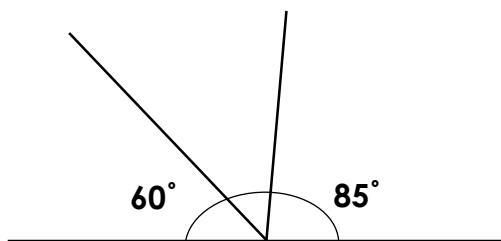
Calculate Angles

5b. Identify the triangle which has a right angle.



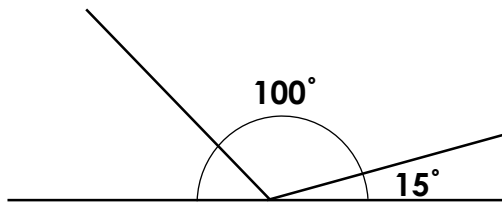
VF

6a. What is the missing angle?



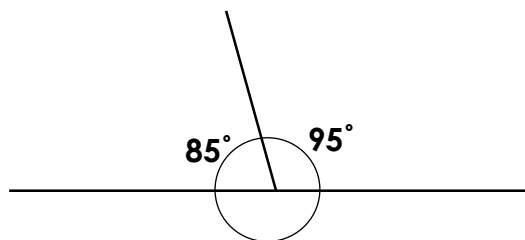
VF

6b. What is the missing angle?



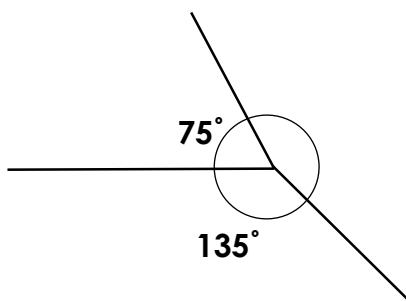
VF

7a. What is the missing angle?



VF

7b. What is the missing angle?



VF

8a. True or false?

75° and 35° and 80° is equal to a straight line.



VF

8b. True or false?

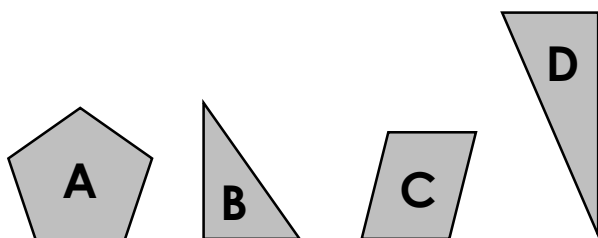
25° and 45° and 290° is equal to angles around a point?



VF

Calculate Angles

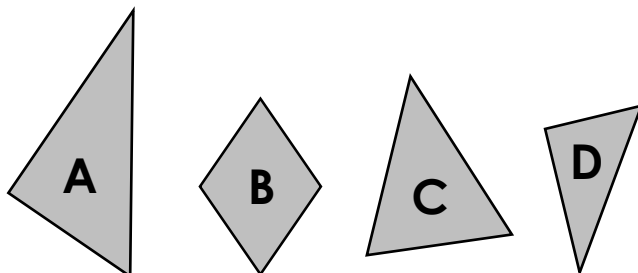
9a. Identify the shape or shapes which have a right angle.



VF

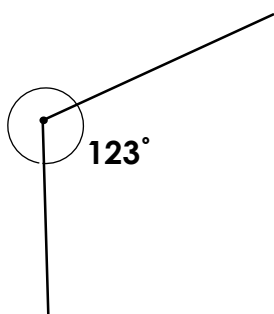
Calculate Angles

9b. Identify the shape or shapes which have a right angle.



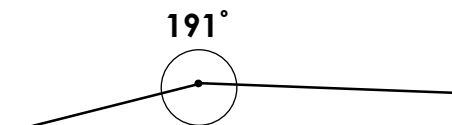
VF

10a. What is the missing angle?



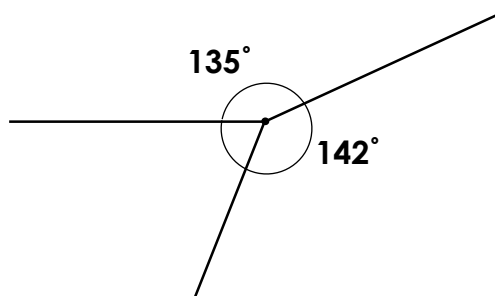
VF

10b. What is the missing angle?



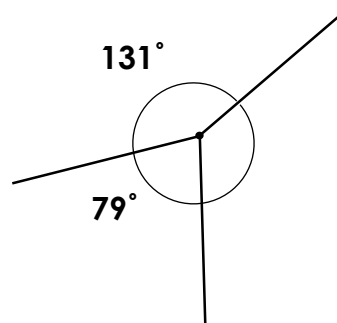
VF

11a. What is the missing angle?



VF

11b. What is the missing angle?



VF

12a. True or false?

136° and 56° and 158° is equal to a full turn.



VF

12b. True or false?

79° and 126° and 155° is equal to a full turn.



VF

Varied Fluency
Calculate Angles

Developing

- 1a. **B**
2a. **50°**
3a. **60°**
4a. **False. $70^\circ + 30^\circ = 100^\circ$**

Expected

- 5a. **C**
6a. **35°**
7a. **180°**
8a. **False. $75^\circ + 35^\circ + 80^\circ = 190^\circ$**

Greater Depth

- 9a. **B and D**
10a. **237°**
11a. **83°**
12a. **False. $136^\circ + 56^\circ + 158^\circ = 350^\circ$**

Varied Fluency
Calculate Angles

Developing

- 1b. **A**
2b. **70°**
3b. **160°**
4b. **True**

Expected

- 5b. **A**
6b. **65°**
7b. **150°**
8b. **True**

Greater Depth

- 9b. **A and D**
10b. **169°**
11b. **150°**
12b. **True. $79^\circ + 126^\circ + 155^\circ = 360^\circ$**