Arithmetic

| **1.** 9.042 – 7.23 | **2.** 82 x 0 | **3.** 42² | **4.** 75% of 16 |

Practice: Angles in Quadrilaterals

5. Recap: What do the angles add up to inside a quadrilateral?

6. What's the missing angle?
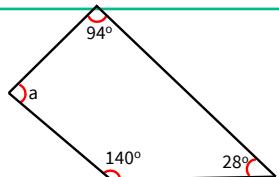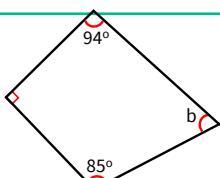
94°
a
140°
28°

7. What is the missing angle?

94°
b
85°

8. What is the missing angle?

c
65°

9. Calculate the missing angles.

d
76°
76°
e
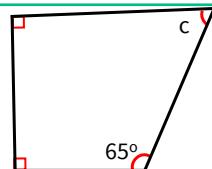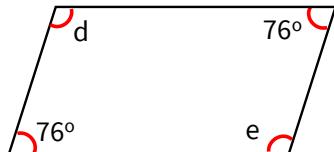
10. Explain how you found the answer to question 9.

11. Calculate the missing angle.
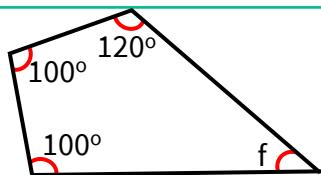
120°
100°
100°
f

**12.** Calculate the missing angle.

89°
92°
72°
g
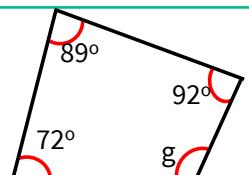
13. Aubrey says the internal angles of a quadrilateral add up to 300°. Is this correct? Explain.

14. Here are 5 different quadrilaterals. Split each quadrilateral into the fewest triangles possible.

What do you notice about triangles and quadrilaterals?

Challenge
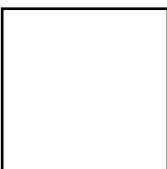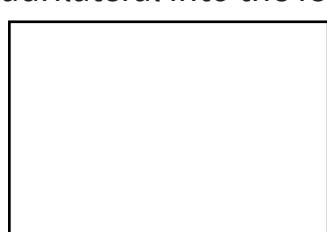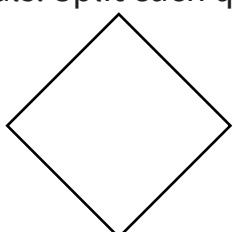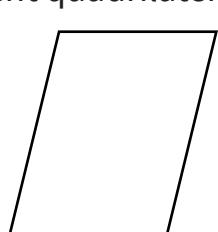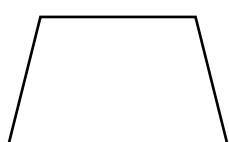
💬 **You might want to talk to an adult**

🔍 **Spot the mistake**

Answers

Q no.	Question	Answer
1	9.042 – 7.23	1.812
2	82 x 0	0
3	42²	1,764
4	75% of 16	12
5	What do the angles add up to inside a quadrilateral?	360º
6	What is the missing angle?	98º
7	What is the missing angle?	91º
8	What is the missing angle?	115º
9	Calculate the missing angles.	104º, 104º
10	Explain how you found the answer to question 9.	Pupils should identify that the shape is a parallelogram. As one set of opposite angles have been identified, the other set will be the same. Pupils can calculate 76º + 76º =152º, then subtract 152º from 360º (208º). They can then divide this by two to find the pair of missing angles (104º).
11	Calculate the missing angle.	40º
12	Calculate the missing angle.	107º
13	Aubrey says the internal angles of a quadrilateral add up to 300º. Is this correct? Explain.	This is incorrect. The internal angles of a quadrilateral add up to 360º. This is the same as two triangles.
14	Here are 5 different quadrilaterals. Split each quadrilateral into the fewest triangles possible. What do you notice about triangles and quadrilaterals?	Pupils should have identified that they can split each quadrilateral into two triangles. Some will link this to the internal angles of triangles being 180º and quadrilaterals are double this as they fit two triangles. This will be important for the following lesson on angles in polygons. It is important that pupils know they need to split the quadrilaterals into the fewest triangles possible.