Arithmetic

1. 5.6 – 2.089

2. 67 x 0

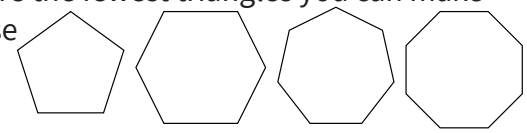
3. 8,784 x 92

4. 19% of 600

Practice: Angles in Polygons

5. Recap: How can finding the fewest amount of triangles in a shape help you identify the sum of the internal angles.

6. What are the fewest triangles you can make from these shapes?



7. What is the sum of the interior angles of a hexagon?
There are ? sides. There are ? triangles. Triangles x 180° = ? Sum of interior angles = ?

8. What is the sum of the interior angles of an octagon?
There are ? sides. There are ? triangles. Triangles x 180° = ? Sum of interior angles = ?

9. Write a formula for finding the number of sides in a polygon.

10. Give the name, sides and sum of the interior angles for a shape with:

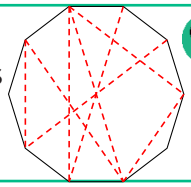
a. 5 triangles b. 2 triangles 8 triangles

11. Give the name, number of triangles and sum of the interior angles for a shape with:

a. 5 sides b. 8 sides c. 3 sides

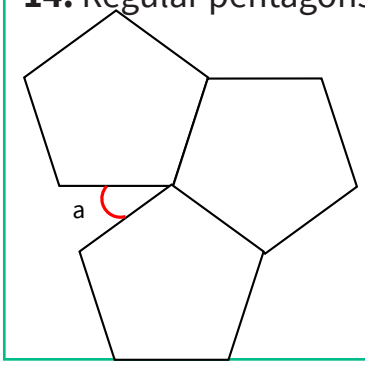
12. Give the name, sides and number of triangles for a shape with:
a. sum of interior angles = 1,800°
b. sum of interior angles = 1,260°

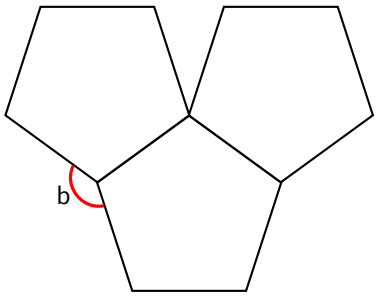
13. Isra says she has found the fewest triangles in this shape. Is she correct?

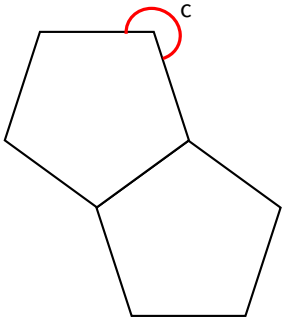


Challenge

14. Regular pentagons have been used to create patterns. Calculate the missing angles.







You might want to talk to an adult

Spot the mistake

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Answers

Q no.	Question	Answer
1	5.6 – 2.089	3.511
2	67 x 0	0
3	8,784 x 92	808,128
4	19% of 600	114
5	How can finding the fewest amount of triangles in a shape help you identify the sum of the internal angles.	Pupils know that the internal angles of a triangle add up to 180°. By finding the fewest amount of triangles in a shape, they can multiply the number of triangles by 180° to calculate the sum of the internal angles for the shape.
6	What are the fewest triangles you can make from these shapes?	3, 4, 5, 6
7	What is the sum of the interior angles of a hexagon?	6, 4, 720°,720°
8	What is the sum of the interior angles of an octagon?	8, 6, 1,080°, 1,080°
9	Write a formula for finding the number of sides in a polygon.	180°(number of sides - 2) or (number of sides - 2)180° or 180°(n - 2)
10	Give the name, sides and sum of the interior angles for a shape with:	a. heptagon, 7, 900°, b. quadrilateral, 4, 360°, c. decagon, 10, 1,440°
11	Give the name, number of triangles and sum of the interior angles for a shape with:	a. pentagon, 3, 540°, b. octagon, 6, 1,080°, c. triangle, 1, 180°
12	Give the name, sides and number of triangles for a shape with:	a. dodecagon, 12, 10, b. Nonagon, 9, 7
13	Isra says she has found the fewest triangles in this shape. Is she correct?	Isra has found too many triangles in this shape. To find the fewest triangles, it is often easier to start from a single vertex and join the other vertices from there.
14	Regular pentagons have been used to create patterns. Calculate the missing angles.	a. 36°, b. 144°, c. 252°

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