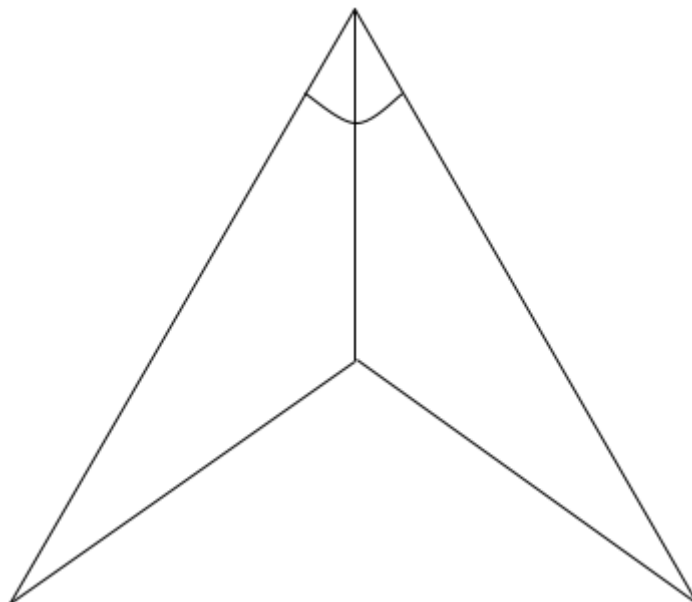


Q2-Q3 (Angles-Perimeter Polygons) **Day 89** Name: _____

1. a) An **equilateral triangle** is made up of **three isosceles triangles**. Calculate the size of the **angle** marked **inside** the equilateral triangle. Write your answer, **in degrees**, in the space below.

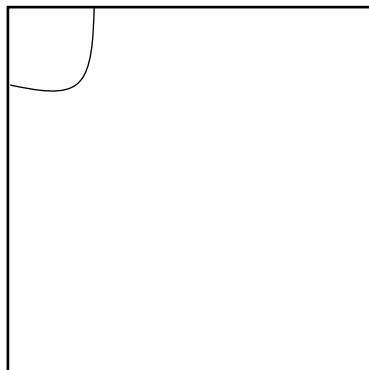


_____°

b) Look again at the equilateral triangle above. The **longest side** of each **isosceles triangles within** the equilateral triangle is **10cm**. Calculate the **perimeter** of the **equilateral triangle**. Write your answer in the space below.

_____cm

2. a) A **square** is made up of **four isosceles triangles**. Calculate the size of the **angle** marked **inside** the square. Write your answer, **in degrees**, in the space below.

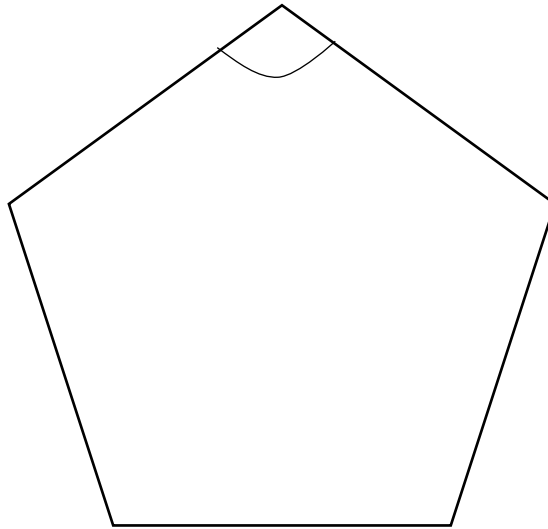


_____°

b) Look again at the square above. The **longest side** of each **isosceles triangles** **within** the square is **14cm**. Calculate the **perimeter** of the **square**. Write your answer in the space below.

_____cm

3. a) A **regular pentagon** is made up of **five isosceles triangles**. Calculate the size of the **angle** marked **inside** the regular pentagon. Write your answer, **in degrees**, in the space below.

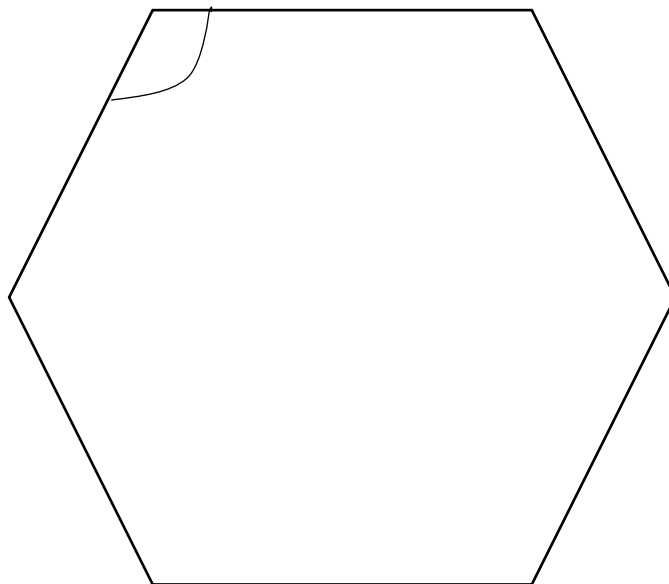


_____°

b) Look again at the regular pentagon above. The **total perimeter** of the regular pentagon above is **105cm**. Calculate the length of **one side** of the **regular pentagon**. Write your answer in the space below.

_____ cm

4. a) A **regular hexagon** is made up of **six isosceles triangles**. Calculate the size of the **angle** marked **inside** the regular hexagon. Write your answer, **in degrees**, in the space below.

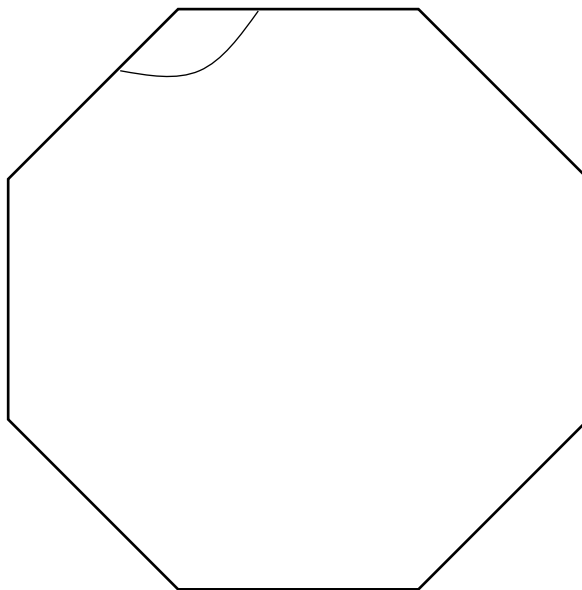


_____°

b) Look again at the regular hexagon above. The **total perimeter** of the regular hexagon above is **189cm**. Calculate the length of **one side** of the **regular hexagon**. Write your answer in the space below.

_____cm

5. a) A **regular octagon** is made up of **eight isosceles triangles**. Calculate the size of the **angle** marked **inside** the regular octagon. Write your answer, **in degrees**, in the space below.

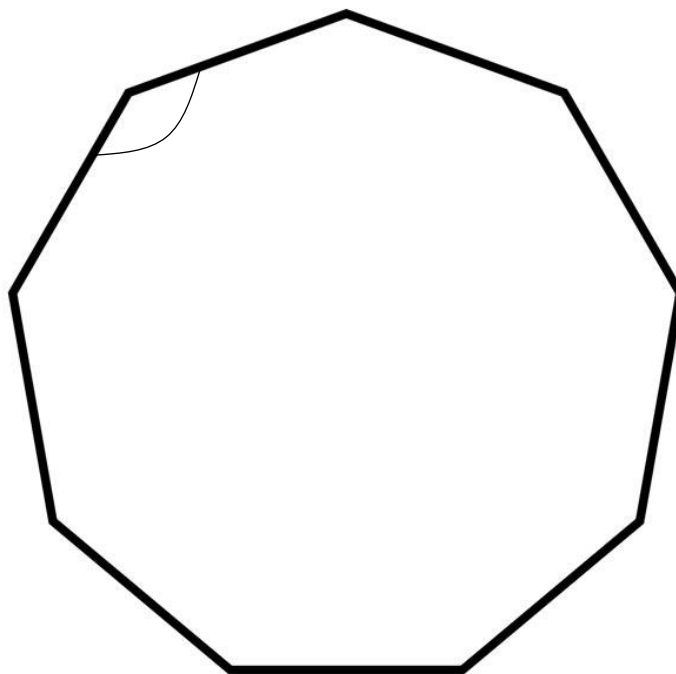


_____°

b) Look again at the regular octagon above. The **total perimeter** of the regular octagon above is **314cm**. Calculate the length of **one side** of the **regular octagon**. Write your answer in the space below.

_____cm

6. a) A **regular nonagon** is made up of **nine isosceles triangles**. Calculate the size of the **angle** marked **inside** the regular nonagon. Write your answer, **in degrees**, in the space below.

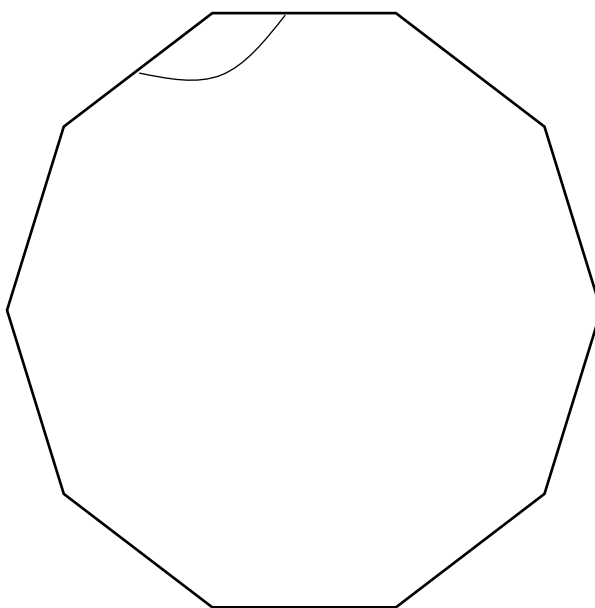


_____°

b) Look again at the regular nonagon above. The **total perimeter** of the regular nonagon above is **1296cm**. Calculate the length of **one side** of the **regular nonagon**. Write your answer in the space below.

_____cm

7. a) A **regular decagon** is made up of **ten isosceles triangles**. Calculate the size of the **angle** marked **inside** the regular decagon. Write your answer, **in degrees**, in the space below.

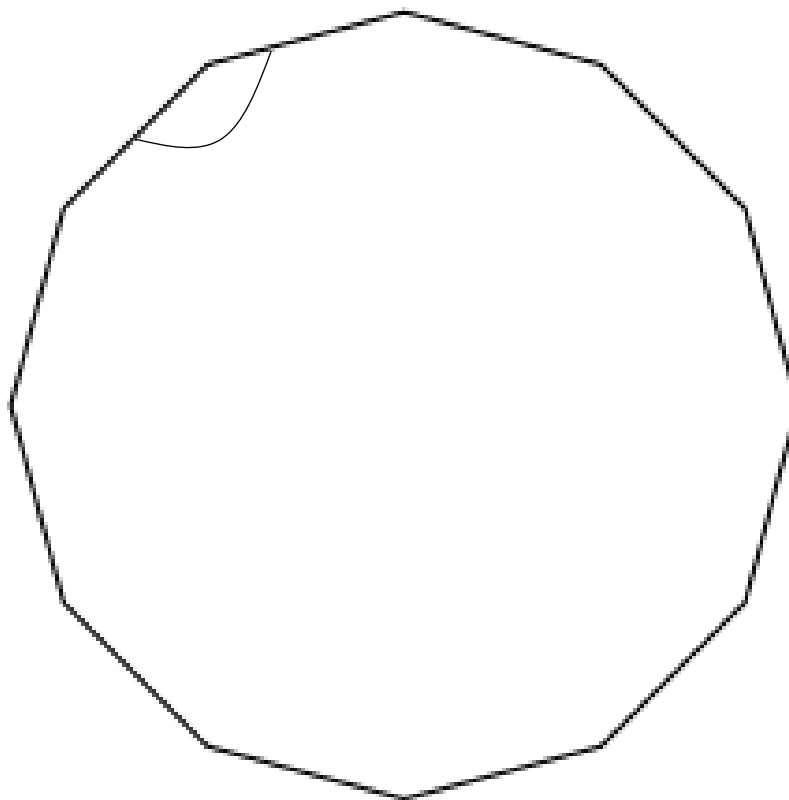


_____°

b) Look again at the regular decagon above. The **total perimeter** of the regular decagon above is **34.8cm**. Calculate the length of **one side** of the **regular decagon**. Write your answer in the space below.

_____cm

8. a) A **regular dodecagon** is made up of **twelve isosceles triangles**. Calculate the size of the **angle** marked **inside** the regular dodecagon. Write your answer, **in degrees**, in the space below.



_____°

b) Look again at the regular dodecagon above. The **total perimeter** of the regular dodecagon above is **189.6cm**. Calculate the length of **one side** of the **regular dodecagon**. Write your answer in the space below.

_____cm

Answers

- | | |
|-----------|----------|
| 1. a) 60 | b) 30 |
| 2. a) 90 | b) 56 |
| 3. a) 108 | b) 21 |
| 4. a) 120 | b) 31.5 |
| 5. a) 135 | b) 39.25 |
| 6. a) 140 | b) 144 |
| 7. a) 144 | b) 3.48 |
| 8. a) 150 | b) 15.8 |