Ratio and angles

1
The angles in a triangle are in the ratio 2 : 3 : 4. Find the largest angle.

Total parts 2 + 3 + 4 = 9
One part 180° ÷ 9 = 20°
Angle × =

Answer _____

2
The angles in a quadrilateral are in the ratio 1 : 2 : 3 : 4. Find the largest angle.

Total parts 1 + 2 + 3 + 4 = 10
One part ÷ =
Angle × =

Answer _____

3
Two angles on a straight line are in the ratio 7 : 5. Find the smaller angle.

Total parts =
One part ÷ =
Angle × =

Answer _____

4
Three angles around a point are in the ratio 3 : 4 : 5. Find the smallest angle.

Angle × =

Answer _____

5
In an isosceles triangle, each base angle and the top angle are in the ratio 2 : 5. Find the top angle.

Answer _____

6
The angles in a pentagon are in the ratio 1 : 2 : 2 : 2 : 2. Find the largest angle.

Answer _____

7
A right angled triangle has its other two angles in the ratio 4 : 5. Find the larger of these two angles.

Answer _____

8
The interior angle and the exterior angle of a regular polygon are in the ratio 7 : 2. How many sides does the polygon have?

Answer _____

Ratio and angles *further practice*

9
The angles in a triangle are in the ratio 1 : 4 : 7. Find the largest angle.

Answer _____

10
Two neighbouring angles in a parallelogram are in the ratio 2 : 7. Find the obtuse angle.

Answer _____

11
The angles in a quadrilateral are in the ratio 3 : 4 : 5 : 6. Find the smallest angle.

Answer _____

12
The angles in a hexagon are in the ratio 2 : 2 : 3 : 3 : 3 : 3. Find the largest angle.

Answer _____

13
Two angles on a straight line are in the ratio 4 : 5. The larger angle is the top angle of an isosceles triangle. Find a base angle of the triangle.

Answer _____

14
The angles in a triangle are in the ratio 1 : 2 : k. The smallest angle is 20°. Find k.

Answer _____

15
The interior angle of a regular polygon is 4 times its exterior angle.
How many sides does it have?

Answer _____

16
The angles in a triangle are in the ratio 3 : 4 : 5. Zara divides 360° by 12 and says the largest angle is 150°.
Explain her mistake and find the largest angle.

Answer _____