MISSING ANGLES IN QUADRILATERALS

Answer all of these questions. Remember to show your working out in all questions.

MAIN QUESTIONS

1. A quadrilateral has angles 80°, 90°, and 100°. Find the missing angle. | 90°

2. A quadrilateral has angles 70°, 85°, and 95°. Find the missing angle. | 110°

3. A quadrilateral has angles 60°, 75°, and 105°. Find the missing angle. | 120°

4. A quadrilateral has angles 50°, 65°, and 115°. Find the missing angle. | 130°

5. A quadrilateral has angles 40°, 55°, and 125°. Find the missing angle. | 140°

6. A quadrilateral has angles 30°, 45°, and 135°. Find the missing angle. | 150°

7. A quadrilateral has angles 20°, 35°, and 145°. Find the missing angle. | 160°

8. A quadrilateral has angles 10°, 25°, and 155°. Find the missing angle. | 170°

9. A quadrilateral has angles 5°, 15°, and 165°. Find the missing angle. | 175°

10. A quadrilateral has angles 1°, 10°, and 170°. Find the missing angle. | 179°

11. A quadrilateral has angles 45°, 90°, and 90°. Find the missing angle.   135°

12. A quadrilateral has angles 60°, 60°, and 120°. Find the missing angle.   120°

13. A quadrilateral has angles 75°, 75°, and 105°. Find the missing angle.   105°

14. A quadrilateral has angles 90°, 90°, and 90°. Find the missing angle.   90°

15. A quadrilateral has angles 100°, 100°, and 80°. Find the missing angle.   80°

16. A quadrilateral has angles 110°, 110°, and 70°. Find the missing angle.   70°

17. A quadrilateral has angles 120°, 120°, and 60°. Find the missing angle.   60°

18. A quadrilateral has angles 130°, 130°, and 50°. Find the missing angle.   50°

19. A quadrilateral has angles 140°, 140°, and 40°. Find the missing angle.   40°

20. A quadrilateral has angles 150°, 150°, and 30°. Find the missing angle.   30°

21. A quadrilateral has angles 160°, 160°, and 20°. Find the missing angle.   20°

22. A quadrilateral has angles 170°, 170°, and 10°. Find the missing angle.   10°

23. A quadrilateral has angles 180°, 180°, and 0°. Find the missing angle.   0°

24. A quadrilateral has angles 25°, 50°, and 125°. Find the missing angle.   160°

25. A quadrilateral has angles 35°, 70°, and 115°. Find the missing angle.   140°

26. A quadrilateral has angles 45°, 90°, and 105°. Find the missing angle.   120°

27. A quadrilateral has angles 55°, 110°, and 95°. Find the missing angle. | 100°

28. A quadrilateral has angles 65°, 130°, and 85°. Find the missing angle. | 80°

29. A quadrilateral has angles 75°, 150°, and 75°. Find the missing angle. | 60°

30. A quadrilateral has angles 85°, 170°, and 65°. Find the missing angle. | 40°

MASTER QUESTIONS

M1. A kite has two angles of 50° and 100°. Find the other two angles if they are equal. | 105° each

M2. A trapezium has angles of 70°, 110°, and 80°. Find the missing angle. | 100°

M3. A parallelogram has two angles of 75°. Find the other two angles. | 105° each

M4. A rhombus has one angle of 60°. Find the other three angles. | 60°, 120°, 120°

M5. A quadrilateral has angles in the ratio 1:2:3. The fourth angle is 120°. Find the other three angles. | 40°, 80°, 120°

M6. A quadrilateral has angles in the ratio 2:3:4. The fourth angle is 90°. Find the other three angles. | 60°, 90°, 120°

M7. A quadrilateral has angles in the ratio 3:4:5. The fourth angle is 60°. Find the other three angles. | 90°, 120°, 150°

M8. A quadrilateral has angles in the ratio 4:5:6. The fourth angle is 30°. Find the other three angles. | 120°, 150°, 180°

M9. A quadrilateral has angles in the ratio 5:6:7. The fourth angle is 0°. Find the other three angles. | 150°, 180°, 210°

M10. A quadrilateral has angles in the ratio 6:7:8. The fourth angle is 270°. Find the other three angles.

180°, 210°, 240°