Mathematics · Grade 7

Memorandum · Term 1–4

TOTAL
74
MARKS

Marking guidelines

1. Award method marks even where the final answer is wrong.
2. Accept any correct method, including one that differs from the memorandum.
3. An answer without the unit loses the unit mark, not the whole question.
4. Where a question asks for two or more items, award one mark per correct item.
5. Do not deduct marks for handwriting, provided the answer can be read.

Question	Answer	Marks	Marking note
QUESTION 1 · Multiple choice · 7 marks			
1.1	a. an isosceles triangle	**1**	
1.2	b. an obtuse angle	**1**	
1.3	b. 6	**1**	
1.4	a. Kite	**1**	
1.5	b. 4	**1**	
1.6	a. a triangular prism	**1**	
1.7	b. 10	**1**	*5 at the top and 5 at the bottom.*
QUESTION 2 · Matching · 4 marks			
2.1	1 = C (perpendicular lines); 2 = E (parallel lines); 3 = A (straight angle); 4 = D (reflex angle)	**4**	*1 mark each.*
QUESTION 3 · Measuring angles and quadrilaterals · 8 marks			
3.1	P 35°; Q 90°; R 145°; S 230°	**4**	*1 mark each; accept ± 2°.*
3.2	a. Square, rhombus b. Trapezium c. Square, rectangle d. Square, rhombus, kite	**4**	*1 mark each; all the shapes in the list are needed for the mark.*

Question	Answer	Marks	Marking note
QUESTION 4 · Solving problems with properties of shapes · 6 marks			
4.1	a. CD = 7 cm, AD = 4 cm — the opposite sides of a parallelogram are equal. b. RS = 9 cm (opposite sides equal); angle R = 90° — all the angles of a rectangle are right angles.	**4**	*2 marks per part: 1 per value. A part without a reason earns at most 1 mark.*
4.2	QR = 5,5 cm; all the sides of an equilateral triangle are equal.	**2**	*1 mark for the length, 1 for the reason.*
QUESTION 5 · Geometry of 2D shapes · 8 marks			
5.1	a. NM = 6 cm — a kite has two pairs of equal adjacent sides. b. 3,5 + 3,5 + 6 + 6 = 19 cm	**3**	*1 mark for a., 2 for b.*
5.2	4 × 4,5 = 18 cm	**2**	*1 mark for the method, 1 for the answer with the unit.*
5.3	Square = four equal sides and four right angles. Parallelogram = two pairs of parallel sides; opposite sides and angles equal. Trapezium = only one pair of parallel sides.	**3**	*1 mark per correct property.*
QUESTION 6 · Circles · 5 marks			
6.1	A circle of radius 3 cm (± 2 mm); AB through O, 6 cm long; CD with both ends on the circle and not through O; one region between two radii and an arc shaded.	**4**	*1 mark each.*
6.2	9 cm	**1**	
QUESTION 7 · Quadrilaterals · 5 marks			
7.1	A = a parallelogram — two pairs of parallel sides; B = a trapezium — only ONE pair of parallel sides; C = a rhombus — four equal sides	**5**	*1 mark for each name (3). 1 mark for a correct property of each of any TWO shapes (2). C: 'rhombus' is expected, but a rhombus is also a special kite (two pairs of equal adjacent sides, see 1.4), so also accept 'kite' for the name mark and award the property mark for a correct kite property.*
QUESTION 8 · Lines of symmetry · 2 marks			
8.1	C (kite): 1 line, through the two vertices where the equal sides meet. D (regular hexagon): 6 lines — 3 through opposite vertices and 3 through the midpoints of opposite sides.	**2**	*1 mark each; all 6 lines are needed for D.*

Question	Answer	Marks	Marking note
QUESTION 9 · Transformations and 3D objects · 6 marks			
9.1	Translation; Rotation; Reflection	**3**	*1 mark each.*
9.2	A = cube; C = cylinder; E = sphere (ball)	**3**	*1 mark each.*
QUESTION 10 · Transformation geometry · 4 marks			
10.1	A = translation; B = reflection; C = rotation	**3**	*1 mark each.*
10.2	Enlargement (or reduction). Translation, reflection and rotation keep the size.	**1**	
QUESTION 11 · Measuring angles, the circle and 3D objects · 7 marks			
11.1	An angle of 65°, correctly measured; it is an acute angle (smaller than 90°).	**2**	*1 mark for the angle (65° ± 2°), 1 for 'acute'.*
11.2	a. The line from the centre to the edge = radius b. The line right through the centre = diameter c. The distance around the circle = circumference	**3**	*1 mark each.*
11.3	A cube's six faces are all squares of the same size, and all its edges are equal. A rectangular prism's faces are rectangles that may differ, so its edges are not all equal. (A cube is therefore a special rectangular prism.)	**2**	*1 mark per shape.*
QUESTION 12 · Triangles, quadrilaterals and the circle · 12 marks			
12.1	PQ = 7 cm (± 2 mm); a line at P at 90° (± 2°); a line through Q also at 90° to PQ, so parallel to the first.	**3**	*1 mark each.*
12.2	Any THREE of: square, rectangle, parallelogram, rhombus.	**3**	*1 mark each.*
12.3	a. Chord b. Sector c. Segment	**3**	*1 mark each.*
12.4	a. 9 cm and 15 cm b. Similar c. No — 6 ÷ 3 = 2 but 8 ÷ 5 = 1,6; the sides are not multiplied by the same factor.	**3**	*1 mark each.*

Total **74 marks**



Free quizzes

Finished this test? Keep practising online!

More than 12 000 free questions for Grades 4 to 7, in every subject and aligned to CAPS. After every answer your child gets a short explanation. No registration needed, and it works on a phone.

meerkatskool.co.za

Scan with your phone to start right away

A small request from us

Thank you for supporting MeerkatSkool! We are a small South African business, and every paper is put together with great care.

This test and memo are a free sample: feel free to share them with other parents and teachers. Ask us about the full booklet: meerkatskool.co.za or WhatsApp 066 462 7629.

Thank you!
The MeerkatSkool team

Free quizzes
meerkatskool.co.za

Email
info@meerkatskool.co.za

WhatsApp and calls
066 462 7629

Help us improve

Found a mistake in this test? WhatsApp us straight away. We fix it within 24 hours and send you the new version.

Scan to WhatsApp us · 066 462 7629