Mathematics · Grade 7

Memorandum · Term 1–4

TOTAL
90
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 · 6 marks			
1.1	a. −3	**1**	
1.2	b. 2 × 2 × 2 × 2 × 2	**1**	
1.3	c. 8	**1**	
1.4	b. −8 < −3	**1**	*−8 lies further to the left on the number line.*
1.5	b. a straight angle	**1**	
1.6	c. population	**1**	
QUESTION 2 · Integers and exponents · 10 marks			
2.1	a. −4 b. 5 c. −14 d. 11	**4**	*1 mark each.*
2.2	a. 16 b. 9 c. 25	**3**	*1 mark each.*
2.3	180 = 2 × 2 × 3 × 3 × 5 = $2^2 \times 3^2 \times 5$ (accept either form)	**3**	*2 marks for the method, 1 for the answer.*
QUESTION 3 · Numbers in context · 11 marks			
3.1	HCF = 24; LCM = 144	**2**	*1 mark each.*
3.2	450 ÷ 100 × 18 = R81	**3**	*2 marks for the method, 1 for the answer.*

Question	Answer	Marks	Marking note
3.3	120 ÷ 10 = 12; 36 and 84	**3**	*1 mark for the parts, 1 per amount.*
3.4	a. $\frac{3}{8}$ = 0,375 = 37,5% b. $\frac{3}{4}$ = 0,75 = 75% c. $\frac{1}{5}$ = 0,2 = 20%	**3**	*1 mark each.*
QUESTION 4 · Integers and algebraic expressions · 10 marks			
4.1	a. 4 b. −4 c. −3 (the order of adding does not matter) d. 9 (the grouping does not matter)	**4**	*1 mark each.*
4.2	a. 2(5) + (−3) = 10 − 3 = 7 b. $5^2 - (-3) = 28$	**3**	*1 mark for the substitution, 1 per answer.*
4.3	a. n + 9 b. 7n c. n − 5	**3**	*1 mark each.*
QUESTION 5 · Equations and patterns · 13 marks			
5.1	a. x = 7 b. x = 5	**3**	*2 marks for a., 1 for b. Accept any correct method, e.g. 7 × 7 + 3 = 52. A correct check by substitution earns the method mark.*
5.2	33; rule: add 7 to the previous term (also accept: multiply the term number by 7 and subtract 2, 7n − 2); 15th term = 5 + 14 × 7 = 103	**3**	*1 mark each.*
5.3	x=1 → y=1; x=4 → y=10; x=7 → y=19; x=10 → y=28	**4**	*1 mark per block.*
5.4	a. 80 + 3 × 12 = R116 b. Cost = 80 + 3n (accept any letter for the cost, e.g. C = 80 + 3n) c. 80 + 3 × 40 = R200	**3**	*1 mark each.*
QUESTION 6 · Angles, lines and transformations · 9 marks			
6.1	128° (accept 126°–130°); obtuse	**2**	*1 mark for the size, 1 for the kind.*
6.2	A: 1 line, from the top vertex to the middle of the base. B: 2 lines, through the midpoints of opposite sides — NOT the diagonals.	**2**	*1 mark each.*
6.3	A row of 3 squares running to the right from O, directly below the horizontal grid line through O, plus 1 square under the square that touches O.	**2**	*1 mark for the correct shape and size, 1 for the correct position and orientation.*
6.4	a. Parallel lines run alongside each other and never meet. b. Perpendicular lines cross at 90°. c. A line segment has two end points; a ray has one end point and carries on.	**3**	*1 mark each.*

Question	Answer	Marks	Marking note
QUESTION 7 · Shapes and transformations · 13 marks			
7.1	Three equal sides = equilateral; Two equal sides = isosceles; One angle of 90° = right-angled	**3**	*1 mark each.*
7.2	a. Radius b. Chord c. Sector	**3**	*1 mark each.*
7.3	Congruent: same shape AND size. Similar: same shape, different size — the angles stay equal and the sides are proportional.	**3**	*1 mark for congruent (same shape and size), 1 for similar (same shape, different size), 1 for: angles equal and sides in proportion.*
7.4	Translation (slide), reflection (mirror) and rotation (turn).	**2**	*2 marks if all three are correct; 1 if two are correct.*
7.5	Two pairs of parallel sides; opposite sides equal; opposite angles equal.	**2**	*1 mark each.*
QUESTION 8 · Measurement · 9 marks			
8.1	a. $2 \times (15 + 9) = 48$ cm b. $15 \times 9 = 135$ cm² c. $15 \times 9 \times 4 = 540$ cm³	**4**	*1 mark for the perimeter, 1 for the area, 2 for the volume.*
8.2	a. 2 450 m b. 3 750 g c. 5 000 cm³	**3**	*1 mark each.*
8.3	Floor = 24 m²; each tile = 0,25 m²; $24 \div 0{,}25 = 96$ tiles	**2**	*1 mark for the areas, 1 for the answer.*
QUESTION 9 · Data Handling · 9 marks			
9.1	a. 34,8 b. 35 c. 24 d. 20–29: 3; 30–39: 4; 40–49: 3	**5**	*1 mark each for a. to c.; 2 marks for the grouping.*
9.2	Her sample is too small and everyone in it already plays the same sport, so the answers are skewed. She should choose learners at random from all the grades and sports.	**2**	*1 mark for the problem, 1 for the fix.*
9.3	4 + 5 + 3 = 12; chance = 5 out of 12 (5/12)	**2**	*1 mark for the total, 1 for the fraction.*

Total **90 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