2.47-3 Mixed Problem-Solving Paper C: Test Pack

GL ASSESSMENT GL-11PLUS-MATHS · Calculators not allowed · about 15 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Amara buys a pencil case costing £3.85 and a set of highlighters costing £1.55. She pays with a £10 note. How much change does she receive?

(2)

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2 A football team recorded the number of goals it scored in 6 matches: 2, 0, 3, 1, 4, 2. Find the mean number of goals scored per match.

(3)

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3 In triangle PQR, angle P = 52 degrees and angle Q = 65 degrees.

(a) Find the size of angle R. **(2)**

(b) State whether triangle PQR is acute, right-angled or obtuse. Give a reason for your answer. **(1)**

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4 Leo thinks of a number, x. He doubles it, adds 9, then divides the result by 3. His final answer is 15.

(a) Form an equation in x to represent this. **(1)**

(b) Solve your equation to find Leo's original number. **(3)**

5 A rectangular sports pitch is 27 m long and 16 m wide. Find the perimeter of the pitch.

(2)

6 Daniel buys 5 notebooks at £0.95 each and a pack of pens costing £2.75. He pays with a £20 note. How much change does he receive?

(3)

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Mark scheme · 2.47-3 Mixed Problem-Solving Paper C: Test Pack

Question 1

3.85 + 1.55 = 5.40 (or equivalent complete method)	**M1**
£4.60 cao	**A1**

Answer: £4.60

Question 2

2 + 0 + 3 + 1 + 4 + 2 = 12 (total goals)	**M1**
12 / 6 (complete correct method)	**M1**
2 cao	**A1**

Answer: 2 goals

Question 3

(a) 52 + 65 = 117 (sum of the two given angles)	**M1**
(a) 63 degrees cao	**A1**

(a) Answer: 63 degrees

(b) acute, because all three angles (52 degrees, 65 degrees and 63 degrees) are less than 90 degrees oe, ft their angle R	**B1**

(b) Answer: Acute

Question 4

(a) (2x + 9) / 3 = 15 oe	**B1**

(a) Answer: (2x + 9) / 3 = 15

(b) 2x + 9 = 45, dependent on a correct equation from part (a)	**dM1**
(b) 2x = 36	**M1**
(b) x = 18 cao	**A1**

(b) Answer: 18

Question 5

27 + 16 = 43, or 2 x 27 + 2 x 16	**M1**
86 m cao	**A1**

Answer: 86 m

Question 6

5 x 0.95 = 4.75	**M1**
4.75 + 2.75 = 7.50	**M1**
£12.50 cao	**A1**

Answer: £12.50

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