2.47-2 Mixed Problem-Solving Paper B: Test Pack

GL ASSESSMENT GL-11PLUS-MATHS · Calculators not allowed · about 20 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Zoe buys a pencil case for £3.45 and a ruler for £0.85. She pays with a £10 note. How much change does she receive?

(2)

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2 The rainfall recorded on six days was, in mm: 12, 15, 9, 15, 21, 8.

(a) Find the mode of the rainfall values. **(2)**

.....

(b) Find the range of the rainfall values. **(2)**

.....

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3 A coach company must transport 158 passengers to a concert. Each coach seats 23 passengers. What is the smallest number of coaches needed to transport everyone?

(3)

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4 A pie chart shows how 216 Year 6 pupils travel to a school trip. The sector for 'Coach' has an angle of 150 degrees. How many pupils travel by coach?

(3)

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5 Three consecutive odd numbers add up to 87. What is the smallest of the three numbers?

(3)

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6 A rectangular allotment measures 22 m by 15 m. Find the perimeter of the allotment.

(2)

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7 Write these fractions in order, starting with the largest: 3/5, 7/10, 5/8

(2)

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Mark scheme · 2.47-2 Mixed Problem-Solving Paper B: Test Pack

Question 1

3.45 + 0.85 = 4.30	**M1**
£5.70 cao	**A1**

Answer: £5.70

Question 2

(a) identifies that 15 occurs twice, more often than any other value	**M1**
(a) 15 mm cao	**A1**

(a) Answer: 15 mm

(b) identifies the highest (21 mm) and lowest (8 mm) values	**M1**
(b) 13 mm cao	**A1**

(b) Answer: 13 mm

Question 3

attempts 158 / 23, e.g. 23 x 6 = 138	**M1**
identifies a remainder of 20 passengers (158 - 138), who still need transport	**dM1**
7 cao	**A1**

Answer: 7 coaches

Question 4

150/360 simplified to 5/12, or equivalent	**M1**
216 x 150/360 (complete correct method)	**M1**
90 cao	**A1**

Answer: 90 pupils

Question 5

87 / 3 = 29 (or forms 3n + 6 = 87)	**M1**
identifies the three numbers as 27, 29, 31	**M1**
27 cao	**A1**

Answer: 27

Question 6

22 + 15 = 37, or 2 x 22 + 2 x 15	**M1**
74 m cao	**A1**

Answer: 74 m

Question 7

converts all three fractions to a common denominator of 40 (24/40, 28/40, 25/40), or uses an equivalent correct comparison method	**M1**
7/10, 5/8, 3/5 cao (correct order)	**A1**

Answer: 7/10, 5/8, 3/5

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