2.47-6 Mixed Problem-Solving Paper F: 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 Tom buys a pencil case for £4.20 and a set of pens for £2.85. He pays with a £10 note. How much change does he receive?

(2)

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2 At midnight the temperature is -8°C. By 6 am it has risen by 11°C. By midday it has then fallen by 4°C from its 6 am value. Find the temperature at midday.

(3)

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3 Three consecutive even numbers add up to 108. What is the largest of the three numbers?

(4)

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4 A van travels 60 km at an average speed of 30 km/h, then a further 105 km at an average speed of 35 km/h. Find the total time taken for the whole journey, in hours.

(4)

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5 Ali saves money in a bank account.

(a) Ali saves £400 in an account that pays simple interest of 5% of the original amount per year. How much interest has been added after 3 years? **(2)**

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(b) Ali then withdraws the total amount in the account (his original £400 plus the interest from part a) and shares it equally between himself and 3 friends. How much does each person receive? **(3)**

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6 A rectangular football pitch measures 18 m by 9 m. Find the perimeter of the pitch.

(2)

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Mark scheme · 2.47-6 Mixed Problem-Solving Paper F: Test Pack

Question 1

4.20 + 2.85 = 7.05 (total spent)	**M1**
£2.95 cao	**A1**

Answer: £2.95

Question 2

-8 + 11 = 3 (temperature at 6 am)	**M1**
3 - 4 (oe)	**M1**
-1°C cao	**A1**

Answer: -1°C

Question 3

forms x + (x + 2) + (x + 4) = 108, where x is the smallest number (oe)	**M1**
simplifies to 3x + 6 = 108 (oe)	**M1**
solves to x = 34 (oe)	**M1**
38 cao	**A1**

Answer: 38

Question 4

time = distance / speed (oe)	**M1**
60 / 30 = 2 hours (first part of the journey)	**M1**
105 / 35 = 3 hours (second part of the journey)	**M1**
5 hours cao	**A1**

Answer: 5 hours

Question 5

(a) 5% of 400 = 20 (interest per year)	**M1**
(a) £60 cao	**A1**

(a) Answer: £60

(b) 400 + 60 = 460 (ft from a)	**M1**
(b) 460 / 4 (oe)	**M1**
(b) £115 cao	**A1**

(b) Answer: £115

Question 6

18 + 9 = 27 (oe)	**M1**
54 m cao	**A1**

Answer: 54 m

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