10.3-7 Reasoning Practice Paper 7: Test Pack

NATIONAL CURRICULUM KS2 National Curriculum Mathematics - Reasoning Practice Paper Framework · Calculators not allowed · about 60 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Write these numbers in order, starting with the smallest: 3082, 3028, 3208, 3820

(1)

2 Round 68472 to the nearest thousand.

(1)

3 Three consecutive even numbers have a sum of 138.

(a) Using n for the smallest of the three numbers, form an equation and solve it to find n. **(3)**

(b) State the three consecutive even numbers. **(1)**

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4 An isosceles triangle has two equal angles of 24 degrees each.

What is the third angle?

Answer: ___ degrees

(2)

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5 A scale in ml has big marks every 200 ml, with 10 equal small divisions between each big mark. The first big mark is 0. The pointer is 2 small divisions after the second big mark.

What is the reading?

Answer: ___ ml

(2)

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6 Part of a train timetable is shown.

Grange: 13:35
Dunmere: 13:50
Ashby: 14:20
Bridgton: 14:59

How many minutes does the train take to travel from Grange to Dunmere?

Answer: ___ minutes

(2)

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7 How many days are there in 6 weeks and 4 days?

Answer: ___

(1)

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8 Write these fractions in order, starting with the smallest: 3/4, 5/8, 7/12

(2)

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9 Jade buys 5 T-shirts at 99p each, 4 lollies at 91p each and 3 balloons at £1.45 each. Jade pays with £15.

How much change does Jade get?

Answer: £___

(3)

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10 At 06:00 the temperature in Leeds was -3°C. By 13:00 it had risen by 11°C. By 20:00 it had fallen by 6°C from its 13:00 value. Work out the temperature at 20:00.

(3)

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11 Part of a train timetable is shown.

Grange: 13:10
Carlow: 13:19
Bridgton: 13:38
Hollin: 13:50

Ben arrives at Carlow station at 13:09.

How many minutes must they wait for the train?

Answer: ___ minutes

(2)

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12 Which is bigger, 9.5 m or 1,055 cm?

Answer: ___

(1)

---

13 Uma buys 1 lolly at £1.41 each and 3 kites at £2.78 each. Uma pays with £10.

How much change does Uma get?

Answer: £___

(2)

---

14 Convert 6.15 litres to ml.

Answer: ___ ml

(1)

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15 Ffion has £360. She spends 2/5 of it on a new bike. How much money does she have left?

(3)

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16 A tank is 10 cm long, 40 cm wide and 40 cm high.

How many litres of water does it hold when full? (1 litre = 1,000 cm cubed.)

Answer: ___ litres

(2)

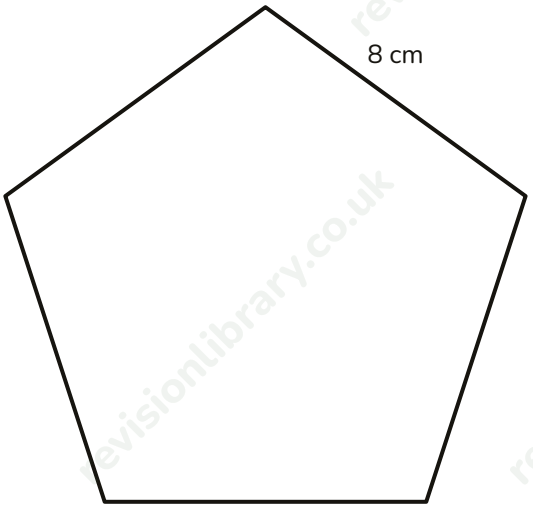
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17 A regular pentagon has sides of length 8 cm.

What is its perimeter?

Answer: ___ cm

Diagram NOT accurately drawn



(2)

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18 Two angles in a triangle are 36 degrees and 68 degrees.

What is the third angle?

Answer: ___ degrees

(2)

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19 Which of these months has 30 days? February, September, December

Answer: ___

(1)

---

20 How many seconds are there in 4 minutes?

Answer: ___

(1)

---

21 Use 1 inch = 2.5 cm.

A strip of card is 6 inches long. How long is it in cm?

Answer: ___ cm

(2)

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22 I am a quadrilateral. I have 4 right angles and 2 lines of symmetry.

What shape am I?

Answer: ___

(2)

---

23 A train leaves at 14:21 and arrives at 17:36.

How many minutes does it take?

Answer: ___ minutes

(2)

---

24 A shop sells 5 pasta packs for £2.11 and 10 pasta packs for £4.03.

Which option costs less for each pack? Write 5 or 10 for the number of packs.

Answer: ___

(2)

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Mark scheme · 10.3-7 Reasoning Practice Paper 7: Test Pack

A correct answer earns full marks unless the question asks for working, a method, proof or explanation.

Question 1

3028, 3082, 3208, 3820 cao (all four in correct order)	B1

Answer: **3028, 3082, 3208, 3820**

Question 2

68000 cao	B1

Answer: **68000**

Question 3

(a) forms n + (n + 2) + (n + 4) = 138 oe	M1
(a) simplifies to 3n + 6 = 138 oe	M1
(a) n = 44 cao	A1

(a) Answer: **n = 44**

(b) 44, 46, 48 cao (ft their n)	B1

(b) Answer: **44, 46, 48**

Question 4

48 seen	M1
132 degrees cao	A1

Answer: **132 degrees**

Question 5

size of a small division found	M1
240 ml cao	A1

Answer: **240 ml**

Question 6

finds the difference between the two times (counting on or subtracting)	M1
15 minutes cao	A1

Answer: **15 minutes**

Question 7

46 cao	B1

Answer: **46**

Question 8

converts to a common denominator, e.g. 18/24, 15/24, 14/24 oe	M1
7/12, 5/8, 3/4 cao (all three in correct order)	A1

Answer: **7/12, 5/8, 3/4**

Question 9

4.95 seen	M1
total 12.94 seen	M1
£2.06 cao	A1

Answer: **£2.06**

Question 10

-3 + 11 = 8 oe	M1
8 - 6, dependent on M1	dM1
2°C cao	A1

Answer: **2°C**

Question 11

finds the wait between arriving and the departure time (counting on or subtracting)	M1
10 minutes cao	A1

Answer: **10 minutes**

Question 12

1,055 cm cao	B1

Answer: **1,055 cm**

Question 13

1 x £1.41 + 3 x £2.78 = £9.75 total cost oe	M1
£0.25 cao	A1

Answer: **£0.25**

Question 14

6,150 ml cao	B1

Answer: **6,150 ml**

Question 15

360 / 5 = 72 (finds one fifth) oe	M1
72 x 2 = 144 (amount spent) oe	M1
216 cao	A1

Answer: **£216**

Question 16

16,000 cm cubed seen	M1
16 litres cao	A1

Answer: **16 litres**

Question 17

5 x 8	M1
40 cm cao	A1

Answer: **40 cm**

Question 18

104 seen	M1
76 degrees cao	A1

Answer: **76 degrees**

Question 19

September cao	B1

Answer: **September**

Question 20

240 cao	B1

Answer: **240**

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Question 21

multiplies by the conversion	**M1**
15 cm cao	**A1**

Answer: **15 cm**

Question 22

eliminates at least one shape	**M1**
rectangle cao	**A1**

Answer: **rectangle**

Question 23

counts on to the next hour or minutes calculation	**M1**
195 minutes cao	**A1**

Answer: **195 minutes**

Question 24

works out a cost per pack for each option	**M1**
10 cao	**A1**

Answer: **10**

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