10.3-7 Reasoning Practice Paper 7: 1-hour 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 A rectangle is 19 mm long and 15 mm wide.

What is its perimeter?

Answer: ___ mm

(1)

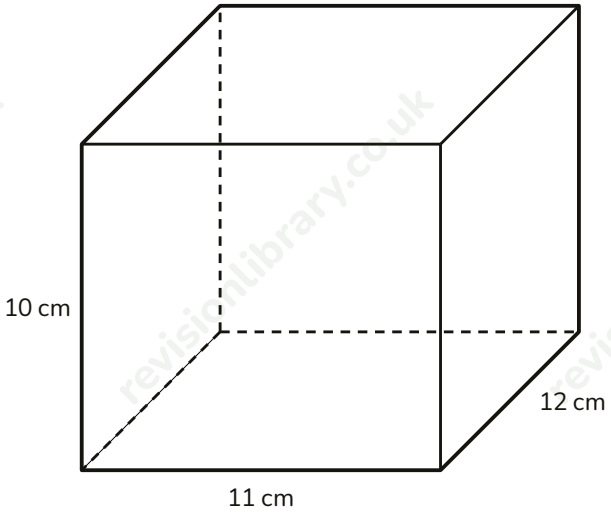
© Revision Library | revisionlibrary.co.uk

2 A cuboid measures 11 cm by 12 cm by 10 cm.

What is its volume in cubic centimetres?

Answer: ___ cm cubed

Diagram NOT accurately drawn



(2)

3 A coach finishes at 12:36 after taking 33 minutes.

What time did it start? Write your answer as a 24-hour clock time.

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

4 The 1st of the month is a Sunday.

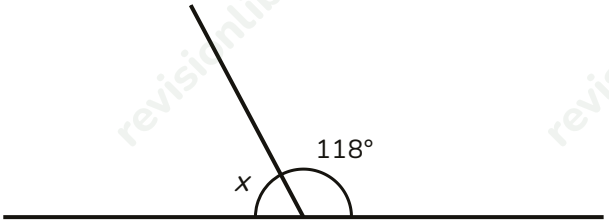
What day of the week is the 23rd?

Answer: ___

(1)

---

5 Two angles lie on a straight line. One angle is 118 degrees. Work out the size of the other angle.



(2)

---

6 A bottle holds 2,000 ml of squash. Jade fills glasses that each hold 250 ml.

How many glasses can be filled?

Answer: ___

(1)

---

7 £1 = 3 francs.

A toy costs 87 francs. How much is that in pounds?

Answer: £___

(1)

© Revision Library | revisionlibrary.co.uk

8 A lesson starts at 19:48 and ends at 22:02.

How many minutes does it take?

Answer: ___ minutes

(2)

---

9 A robot turns 5 quarter turns clockwise. Through how many degrees has it turned altogether?

Answer: ___ degrees

(1)

---

10 A shop sells 3 rice packs for £1.09 and 4 rice packs for £4.12.

Which option costs less for each pack? Write 3 or 4 for the number of packs.

Answer: ___

(2)

---

11 A shop sells 2 pasta packs for £2.39 and 3 pasta packs for £4.02.

Which option costs less for each pack? Write 2 or 3 for the number of packs.

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

12 Tom buys a bag of potatoes weighing 4.3 kg and a bag of carrots weighing 845 g.

What is the total mass in kg?

Answer: ___ kg

(2)

---

13 Part of a train timetable is shown.

Grange: 09:25
Fenwick: 09:58
Carlow: 10:20
Dunmere: 10:38

Kofi arrives at Fenwick station at 09:53.

How many minutes must they wait for the train?

Answer: ___ minutes

(2)

---

14 Convert 71,700 mm to m.

Answer: ___ m

(1)

© Revision Library | revisionlibrary.co.uk

15 Part of a train timetable is shown.

Grange: 14:15
Eastleigh: 14:39
Bridgton: 15:14
Ashby: 15:22

How many minutes does the train take to travel from Eastleigh to Ashby?

Answer: ___ minutes

(1)

---

16 A train leaves at 17:25 and arrives at 22:46.

How many minutes does it take?

Answer: ___ minutes

(2)

---

17 A lesson finishes at 15:01 after taking 1 hour 37 minutes.

What time did it start? Write your answer as a 24-hour clock time.

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

18 In a survey of 300 tutors, 24% said they prefer online lessons. Of those who prefer online lessons, 1/6 said they use video calls every day. How many tutors said they use video calls every day?

(3)

---

19 Chidi read 5 books in June, Grace read 8 books, Tomasz read 3 books and Amara read 6 books. Work out the mean number of books read by the four pupils.

(2)

---

20 A fruit squash is made by mixing juice and water in the ratio 2:5. Isla makes 700ml of squash. How many millilitres of juice does she use?

(3)

---

21 A fun run costs £4.75 per entry for adults and £2.50 per entry for children. A family of 2 adults and 3 children enters the fun run. They pay with three £10 notes. How much change do they receive?

(3)

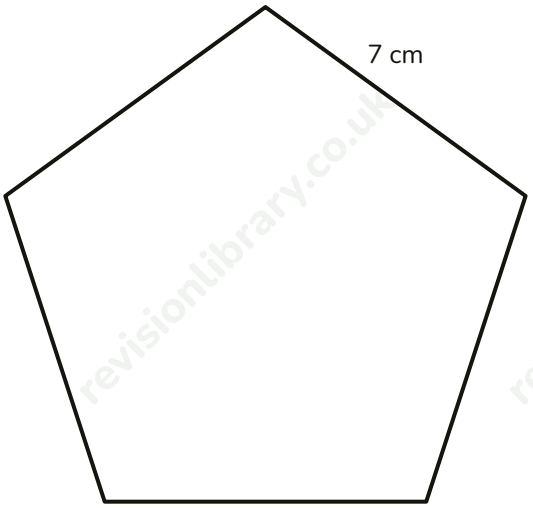
© Revision Library | revisionlibrary.co.uk

22 A regular pentagon has all sides equal. Each side is 7 cm.

What is its perimeter?

Answer: ___ cm

Diagram NOT accurately drawn



(1)

23 Convert 21 litres to ml.

Answer: ___ ml

(1)

24 £1 = 4 dollars.

How many dollars do you get for £57?

Answer: ___ dollars

(1)

© Revision Library | revisionlibrary.co.uk

25 Uma has a 9 m roll of wire. Uma uses 753 cm of it.

How many centimetres of wire are left?

Answer: ___ cm

(2)

---

26 Write 597p in pounds.

Answer: £___

(1)

---

27 A scale in ml has big marks every 250 ml, with 10 equal small divisions between each big mark. The first big mark is 1000. The pointer is 6 small divisions after the second big mark.

What is the reading?

Answer: ___ ml

(1)

© Revision Library | revisionlibrary.co.uk

28 Which is bigger, 5.9 kg or 5,722 g?

Answer: ___

(1)

29 Use 1 foot = 30 cm.

A strip of card is 7 feet long. How long is it in cm?

Answer: ___ cm

(1)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 10.3-7 Reasoning Practice Paper 7: 1-hour Pack

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

Question 1

68 mm cao — **B1**

Answer: **68 mm**

Question 2

multiplies two dimensions — **M1**

1320 cm cubed cao — **A1**

Answer: **1320 cm cubed**

Question 3

subtracts hours then minutes — **M1**

12:03 cao — **A1**

Answer: **12:03**

Question 4

Monday cao — **B1**

Answer: **Monday**

Question 5

180 - 118 oe — **M1**

62 degrees cao — **A1**

Answer: **62 degrees**

Question 6

8 cao — **B1**

Answer: **8**

Question 7

£29 cao — **B1**

Answer: **£29**

Question 8

counts on to the next hour or minutes calculation — **M1**

134 minutes cao — **A1**

Answer: **134 minutes**

Question 9

450 degrees cao — **B1**

Answer: **450 degrees**

Question 10

works out a cost per pack for each option — **M1**

3 cao — **A1**

Answer: **3**

Question 11

works out a cost per pack for each option — **M1**

2 cao — **A1**

Answer: **2**

Question 12

845 g = 0.845 kg seen — **M1**

5.145 kg cao — **A1**

Answer: **5.145 kg**

Question 13

finds the wait between arriving and the departure time (counting on or subtracting) — **M1**

5 minutes cao — **A1**

Answer: **5 minutes**

Question 14

71.7 m cao — **B1**

Answer: **71.7 m**

Question 15

43 minutes cao — **B1**

Answer: **43 minutes**

Question 16

counts on to the next hour or minutes calculation — **M1**

321 minutes cao — **A1**

Answer: **321 minutes**

Question 17

subtracts hours then minutes — **M1**

13:24 cao — **A1**

Answer: **13:24**

Question 18

24% of 300 = 72 oe — **M1**

1/6 of 72, dependent on M1 — **dM1**

12 cao — **A1**

Answer: **12 tutors**

Question 19

5 + 8 + 3 + 6 = 22 oe — **M1**

5.5 cao (accept 5 1/2) — **A1**

Answer: **5.5 books**

Question 20

700 / 7 = 100 (value of one part) oe — **M1**

100 x 2, dependent on M1 — **dM1**

200ml cao — **A1**

Answer: **200ml**

Question 21

2 x 4.75 = 9.50 and 3 x 2.50 = 7.50 oe — **M1**

9.50 + 7.50 = 17.00 oe — **M1**

£13.00 cao — **A1**

Answer: **£13.00**

Question 22

35 cm cao — **B1**

Answer: **35 cm**

© Revision Library | revisionlibrary.co.uk

Question 23

21,000 ml cao **B1**

Answer: **21,000 ml**

Question 24

228 dollars cao **B1**

Answer: **228 dollars**

Question 25

9 m = 900 cm seen **M1**

147 cm cao **A1**

Answer: **147 cm**

Question 26

£5.97 cao **B1**

Answer: **£5.97**

Question 27

1400 ml cao **B1**

Answer: **1400 ml**

Question 28

5.9 kg cao **B1**

Answer: **5.9 kg**

Question 29

210 cm cao **B1**

Answer: **210 cm**

© Revision Library | revisionlibrary.co.uk