10.3-6 Reasoning Practice Paper 6: Test Pack

STA KS2 National Curriculum Mathematics - STA Reasoning Test Framework · Calculators not allowed · about 60 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Write the value of the digit 8 in the number 682,451.

(1)

2 Find 3/8 of 64.

(1)

3 Write the number of degrees in two right angles.

(1)

4 Priya ate 1/4 of a pizza. Her brother ate 3/8 of the same pizza. What fraction of the pizza was eaten altogether?

(2)

5 1/3 + 1/4 =

Answer: ___

(2)

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6 2/3 - 3/6 =

Answer: ___

(1)

---

7 Write the number two hundred and five thousand seven hundred and eighty-eight in digits.

Answer: ___

(1)

---

8 Write 606,400 in words.

Answer: ___

(1)

---

9 What is 12 less than 3?

Answer: ___

(1)

---

10 What is the value of the digit 3 in 184,903?

Answer: ___

(1)

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11 Mateo has 5,266 coins. Mateo puts 3,655 aside and shares the rest equally between 9 friends.

How many coins does each friend get?

Answer: ___

(2)

---

12 A stadium had 2,596 fans on Saturday and 4,004 fans on Sunday.

How many more fans came on the busier day?

Answer: ___

(1)

---

13 Which fraction is equivalent to 1/5?

A: 3/15 B: 4/15 C: 3/16 D: 4/8

Write the letter.

Answer: ___

(1)

---

14 Write these fractions in order, starting with the largest.

8/10, 3/5, 1/5

Answer: ___

(2)

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15 Look at this number sequence:

7, 15, 23, 31, ...

The rule is 'add 8 each time'.

(a) Write the next two terms in the sequence. **(1)**

(b) One term in the sequence is 111. Find the term immediately before it in the sequence. **(2)**

.....

16 Five friends compared how many minutes they spent reading one evening: Olivia read for 18 minutes, Hassan read for 36 minutes, Freya read for 15 minutes, Callum read for 40 minutes and Mia read for 21 minutes.

(a) Calculate the mean number of minutes spent reading. **(2)**

.....

(b) Hassan read for exactly twice as many minutes as one of the other friends. Write down which friend this was. **(1)**

17 Round 409,667 to the nearest ten thousand.

Answer: ___

(1)

18 What is 10,000 less than 311,428?

Answer: ___

(1)

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19 1/2 = ___/12

Answer: ___

(1)

---

20 Work out 3 5/6 - 2 3/4.

Give your answer in its simplest form.

Answer: ___

(3)

---

21 Estimate 8,295 - 7,419 by rounding each number to the nearest 1,000 first.

Answer: ___

(2)

---

22 Write 46 as a Roman numeral.

Answer: ___

(1)

---

23 What is the value of the digit 6 in 940,367?

Answer: ___

(1)

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24 Write the number two hundred and sixty thousand one hundred and fifty-one in digits.

Answer: ___

(1)

---

25 Write 403 as a Roman numeral.

Answer: ___

(1)

---

26 Which fraction is equivalent to 4/5?

A: 12/16 B: 13/15 C: 7/8 D: 12/15

Write the letter.

Answer: ___

(1)

---

27 A train leaves Leeds at 09:52 and arrives in York at 10:27. Calculate how many minutes the journey takes.

(2)

---

28 Use each of the digits 3, 1, 7, 6 once to make the smallest possible 4-digit number.

Answer: ___

(2)

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29 Find the missing number in this sequence.

56,676, 46,676, 36,676, 26,676, 16,676, ___

Answer: ___

(1)

---

30 The sum of 4 consecutive numbers is 94.

What is the smallest of the 4 numbers?

Answer: ___

(2)

---

31 Write these numbers in order, starting with the smallest.

401,919, 453,746, 419,655, 393,985

Answer: ___

(1)

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Mark scheme · 10.3-6 Reasoning Practice Paper 6: Test Pack

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

Question 1

80000 oe (accept 80,000 or 8 ten thousands); cao **B1**

Answer: **80,000**

Question 2

24 cao **B1**

Answer: **24**

Question 3

180 (degrees) cao **B1**

Answer: **180 degrees**

Question 4

1/4 converted to 2/8 (common denominator) seen **M1**

5/8 oe cao **A1**

Answer: **5/8**

Question 5

method seen **M1**

7/12 cao **A1**

Answer: **7/12**

Question 6

1/6 cao **B1**

Answer: **1/6**

Question 7

205,788 cao **B1**

Answer: **205,788**

Question 8

six hundred and six thousand four hundred cao **B1**

Answer: **six hundred and six thousand four hundred**

Question 9

-9 cao **B1**

Answer: **-9**

Question 10

3 cao **B1**

Answer: **3**

Question 11

1,611 seen **M1**

179 cao **A1**

Answer: **179**

Question 12

1,408 cao **B1**

Answer: **1,408**

Question 13

A cao **B1**

Answer: **A**

Question 14

converts to a common denominator or decimals **M1**

8/10, 3/5, 1/5 cao **A1**

Answer: **8/10, 3/5, 1/5**

Question 15

(a) 39 and 47 both correct cao **B1**

(a) Answer: **39, 47**

(b) 111 - 8 (or equivalent method, e.g. continuing the sequence up to the term before 111) seen **M1**

(b) 103 cao **A1**

(b) Answer: **103**

Question 16

(a) 18+36+15+40+21 (=130) seen **M1**

(a) 26 (minutes) cao **A1**

(a) Answer: **26 minutes**

(b) Olivia cao **B1**

(b) Answer: **Olivia**

Question 17

410,000 cao **B1**

Answer: **410,000**

Question 18

301,428 cao **B1**

Answer: **301,428**

Question 19

6 cao **B1**

Answer: **6**

Question 20

converts to a common denominator **M1**

one correct fraction seen **M1**

1 1/12 or 13/12 cao **A1**

Answer: **1 1/12**

Question 21

8,000 and 7,000 seen **M1**

1,000 cao **A1**

Answer: **1,000**

Question 22

XLVI cao **B1**

Answer: **XLVI**

Question 23

60 cao **B1**

Answer: **60**

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Question 24

260,151 cao **B1**

Answer: **260,151**

Question 25

CDIII cao **B1**

Answer: **CDIII**

Question 26

D cao **B1**

Answer: **D**

Question 27

correct method seen, e.g. 09:52 to 10:00 = 8 minutes, then 10:00 to 10:27 = 27 minutes **M1**

35 (minutes) cao **A1**

Answer: **35 minutes**

Question 28

digits placed in value order **M1**

1,367 cao **A1**

Answer: **1,367**

Question 29

6,676 cao **B1**

Answer: **6,676**

Question 30

uses the mean or tests numbers **M1**

22 cao **A1**

Answer: **22**

Question 31

393,985, 401,919, 419,655, 453,746 cao **B1**

Answer: **393,985, 401,919, 419,655, 453,746**

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