10.3-6 Reasoning Practice Paper 6: 1-hour 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 Roman numeral CDXL as a number.

Answer: ___

(1)

---

2 9/10 - 1/2 =

Answer: ___

(2)

---

3 Write the number nine hundred and thirteen thousand eight hundred and thirty-six in digits.

Answer: ___

(1)

---

4 What is the value of the digit 4 in 814,037?

Answer: ___

(1)

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5 Write 15/18 in its simplest form.

Answer: ___

(2)

---

6 A recipe for 12 muffins needs 180g of flour. Zainab wants to make 20 muffins using the same recipe. Calculate how much flour she needs.

(2)

---

7 What is the value of the digit 2 in 253,817?

Answer: ___

(1)

---

8 Find the missing number in this sequence.

10,892, 10,392, 9,892, ___, 8,892, 8,392

Answer: ___

(1)

---

9 Write <, > or = in the box.

23,238 [ ] 23,582

Answer: ___

(1)

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10 Estimate 5,123 + 7,488 by rounding each number to the nearest 1,000 first.

Answer: ___

(2)

---

11 What is the value of the digit 5 in 706,529?

Answer: ___

(1)

---

12 A coat costs £68. In a sale, the price is reduced by 25%. Calculate the sale price of the coat.

(2)

---

13 A number line starts at 30,000 and goes up in equal steps of 10,000. An arrow points to the 5th mark after the start.

What number does the arrow show?

Answer: ___

(1)

---

14 On Monday the temperature was -10 degrees. On Tuesday it was 2 degrees.

What is the difference between the two temperatures?

Answer: ___ degrees

(2)

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15 Write 915,216 in words.

Answer: ___

(1)

---

16 Work out 3 3/10 - 1 2/5.

Give your answer in its simplest form.

Answer: ___

(2)

---

17 Find the missing number in this sequence.

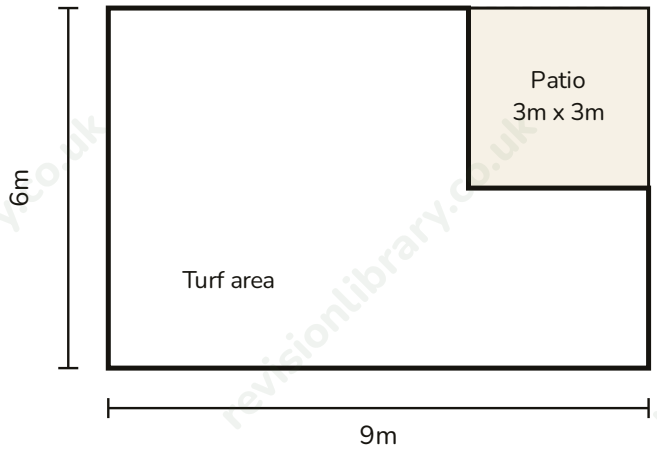
593, 543, 493, ___, 393, 343

Answer: ___

(1)

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18 Ryan's garden is a rectangle 9m long and 6m wide. He wants to lay turf on the whole garden except for a square patio in one corner, which measures 3m by 3m. Calculate the area of turf Ryan needs.



(3)

19 Write 18/30 in its simplest form.

Answer: ___

(2)

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20 Work out 3/4 - 5/8.

Give your answer in its simplest form.

Answer: ___

(2)

---

21 Find the missing number in this sequence.

300, 275, 250, 225, ___, 175

Answer: ___

(1)

---

22 Write <, > or = in the box.

1/7 [ ] 1/12

Answer: ___

(1)

---

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

1/10, 6/10, 3/4

Answer: ___

(2)

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24 Amara has three pieces of ribbon: 1.2m, 85cm and 640mm. She joins them end to end with no overlap. Calculate the total length of ribbon, giving your answer in metres.

(3)

---

25 Write <, > or = in the box.

2/4 [ ] 2/9

Answer: ___

(1)

---

26 What number is exactly halfway between -5 and 3?

Answer: ___

(1)

---

27 Work out 2/5 + 4/5.

Give your answer in its simplest form.

Answer: ___

(2)

---

28 Round 943,698 to the nearest hundred.

Answer: ___

(1)

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29 What is 10 less than 0?

Answer: ___

(1)

---

30 Complete the partition.

421,476 = 400,000 + 20,000 + ___ + 400 + 70 + 6

Answer: ___

(1)

---

31 Which fraction is equivalent to 3/4?

A: 7/8 B: 6/8 C: 5/6 D: 6/9

Write the letter.

Answer: ___

(1)

---

32 Write these numbers in order, starting with the largest.

686,285, 663,533, 647,169, 646,973

Answer: ___

(1)

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Mark scheme · 10.3-6 Reasoning Practice Paper 6: 1-hour Pack

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

Question 1

440 cao — **B1**

Answer: **440**

Question 2

method seen — **M1**

2/5 cao — **A1**

Answer: **2/5**

Question 3

913,836 cao — **B1**

Answer: **913,836**

Question 4

4,000 cao — **B1**

Answer: **4,000**

Question 5

divides numerator and denominator by a common factor — **M1**

5/6 cao — **A1**

Answer: **5/6**

Question 6

180 div 12 (=15g per muffin) or equivalent scaling method seen — **M1**

300 (g) cao — **A1**

Answer: **300g**

Question 7

200,000 cao — **B1**

Answer: **200,000**

Question 8

9,392 cao — **B1**

Answer: **9,392**

Question 9

< cao — **B1**

Answer: **<**

Question 10

5,000 and 7,000 seen — **M1**

12,000 cao — **A1**

Answer: **12,000**

Question 11

500 cao — **B1**

Answer: **500**

Question 12

25% of 68 (=17) found — **M1**

£51 cao — **A1**

Answer: **£51**

Question 13

80,000 cao — **B1**

Answer: **80,000**

Question 14

counts across zero — **M1**

12 degrees cao — **A1**

Answer: **12 degrees**

Question 15

nine hundred and fifteen thousand two hundred and sixteen cao — **B1**

Answer: **nine hundred and fifteen thousand two hundred and sixteen**

Question 16

converts to a common denominator — **M1**

1 9/10 or 19/10 cao — **A1**

Answer: **1 9/10**

Question 17

443 cao — **B1**

Answer: **443**

Question 18

9 x 6 (=54) area of whole garden found — **M1**

3 x 3 (=9) area of patio found — **M1**

45 (m^2) cao — **A1**

Answer: **45 m^2**

Question 19

divides numerator and denominator by a common factor — **M1**

3/5 cao — **A1**

Answer: **3/5**

Question 20

converts to a common denominator — **M1**

1/8 cao — **A1**

Answer: **1/8**

Question 21

200 cao — **B1**

Answer: **200**

Question 22

> cao — **B1**

Answer: **>**

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Question 23

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

3/4, 6/10, 1/10 cao **A1**

Answer: **3/4, 6/10, 1/10**

Question 24

all three lengths converted to the same unit, e.g. 120cm, 85cm, 64cm **M1**

120+85+64 (=269) or equivalent addition seen **M1**

2.69 (m) oe cao **A1**

Answer: **2.69m**

Question 25

> cao **B1**

Answer: **>**

Question 26

-1 cao **B1**

Answer: **-1**

Question 27

converts to a common denominator **M1**

1 1/5 or 6/5 cao **A1**

Answer: **1 1/5**

Question 28

943,700 cao **B1**

Answer: **943,700**

Question 29

-10 cao **B1**

Answer: **-10**

Question 30

1,000 cao **B1**

Answer: **1,000**

Question 31

B cao **B1**

Answer: **B**

Question 32

686,285, 663,533, 647,169, 646,973 cao **B1**

Answer: **686,285, 663,533, 647,169, 646,973**

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