1.1 Reasoning: Number and Place Value: 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 Amara is thinking of a 3-digit number. It is a multiple of both 6 and 9. It is greater than 300 and less than 400. The digit in the tens place is double the digit in the ones place. Find Amara's number, showing your reasoning.

(4)

---

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

544,961, 535,288, 540,609, 516,871

Answer: ___

(1)

---

3 Write the Roman numeral DCCCXIX as a number.

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

4 Write the Roman numeral CMXXXII as a number.

Answer: ___

(1)

---

5 Round 791,762 to the nearest ten.

Answer: ___

(1)

---

6 A festival had 2,332 visitors on Saturday and 8,547 visitors on Sunday.

How many more visitors came on the busier day?

Answer: ___

(2)

---

7 Estimate 9,578 - 7,325 by rounding each number to the nearest 1,000 first.

Answer: ___

(2)

---

8 Estimate 4,934 - 3,203 by rounding each number to the nearest 1,000 first.

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

9 Round 362,235 to the nearest ten.

Answer: ___

(1)

---

10 A zoo had 9,616 visitors on Saturday and 5,874 visitors on Sunday.

How many more visitors came on the busier day?

Answer: ___

(1)

---

11 Write the Roman numeral DCCCLIV as a number.

Answer: ___

(1)

---

12 Write the Roman numeral LXI as a number.

Answer: ___

(1)

---

13 The sum of 4 consecutive even numbers is 220.

What is the smallest of the 4 numbers?

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

14 On Monday the temperature was -5 degrees. On Tuesday it was 11 degrees.

What is the difference between the two temperatures?

Answer: ___ degrees

(2)

---

15 Write 176,727 in words.

Answer: ___

(1)

---

16 The sum of 3 consecutive odd numbers is 153.

What is the smallest of the 3 numbers?

Answer: ___

(2)

---

17 What is 100 less than 507,163?

Answer: ___

(1)

---

18 What number is exactly halfway between -7 and 1?

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

19 Write the Roman numeral DCCCX as a number.

Answer: ___

(1)

---

20 Round 525,091 to the nearest hundred.

Answer: ___

(1)

---

21 The temperature in Moscow at 6 am is -7 degrees. By noon it has risen by 3 degrees.

What is the temperature at noon?

Answer: ___ degrees

(2)

---

22 Write <, > or = in the box.

77,834 [ ] 78,253

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

23 The temperature in Helsinki at 6 am is -1 degrees. By noon it has risen by 14 degrees.

What is the temperature at noon?

Answer: ___ degrees

(2)

---

24 Find the missing number in this sequence.

645, 636, 627, 618, 609, ___

Answer: ___

(1)

---

25 Write the Roman numeral DCLXIII as a number.

Answer: ___

(1)

---

26 Round 582,029 to the nearest thousand.

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

27 Write <, > or = in the box.

20,955 [ ] 20,620

Answer: ___

(1)

---

28 Find the missing number in this sequence.

911, 904, 897, ___, 883, 876

Answer: ___

(1)

---

29 What is the value of the digit 4 in 762,940?

Answer: ___

(1)

---

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

356,260, 363,062, 403,439, 374,913

Answer: ___

(1)

---

31 What is the value of the digit 1 in 958,314?

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

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

288,516, 299,905, 318,706, 282,424

Answer: ___

(1)

---

33 Victor has 5,832 stickers. Victor is given 3,228 more and then gives away 8,942.

How many stickers does Victor have now?

Answer: ___

(2)

---

34 Complete the partition.

291,674 = 200,000 + 90,000 + 1,000 + 600 + ___ + 4

Answer: ___

(1)

---

35 Use each of the digits 4, 8, 3, 2 once to make the largest possible 4-digit number.

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 1.1 Reasoning: Number and Place Value: 1-hour Pack

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

Question 1

recognises a multiple of both 6 and 9 must be a multiple of 18 (the lowest common multiple)	M1
lists at least 4 correct multiples of 18 between 300 and 400: 306, 324, 342, 360, 378, 396	M1
correctly tests the tens = 2 x ones condition against the list	A1
342 cao, with reasoning that tens digit 4 = 2 x ones digit 2	A1

Answer: **342**

Question 2

516,871, 535,288, 540,609, 544,961 cao	B1

Answer: **516,871, 535,288, 540,609, 544,961**

Question 3

819 cao	B1

Answer: **819**

Question 4

932 cao	B1

Answer: **932**

Question 5

791,760 cao	B1

Answer: **791,760**

Question 6

subtraction method seen	M1
6,215 cao	A1

Answer: **6,215**

Question 7

10,000 and 7,000 seen	M1
3,000 cao	A1

Answer: **3,000**

Question 8

5,000 and 3,000 seen	M1
2,000 cao	A1

Answer: **2,000**

Question 9

362,240 cao	B1

Answer: **362,240**

Question 10

3,742 cao	B1

Answer: **3,742**

Question 11

854 cao	B1

Answer: **854**

Question 12

61 cao	B1

Answer: **61**

Question 13

uses the mean or tests numbers	M1
52 cao	A1

Answer: **52**

Question 14

counts across zero	M1
16 degrees cao	A1

Answer: **16 degrees**

Question 15

one hundred and seventy-six thousand seven hundred and twenty-seven cao	B1

Answer: **one hundred and seventy-six thousand seven hundred and twenty-seven**

Question 16

uses the mean or tests numbers	M1
49 cao	A1

Answer: **49**

Question 17

507,063 cao	B1

Answer: **507,063**

Question 18

-3 cao	B1

Answer: **-3**

Question 19

810 cao	B1

Answer: **810**

Question 20

525,100 cao	B1

Answer: **525,100**

Question 21

adds the rise to the negative start	M1
-4 degrees cao	A1

Answer: **-4 degrees**

Question 22

< cao	B1

Answer: **<**

© Revision Library | revisionlibrary.co.uk

Question 23

adds the rise to the negative start **M1**

13 degrees cao **A1**

Answer: **13 degrees**

Question 24

600 cao **B1**

Answer: **600**

Question 25

663 cao **B1**

Answer: **663**

Question 26

582,000 cao **B1**

Answer: **582,000**

Question 27

> cao **B1**

Answer: **>**

Question 28

890 cao **B1**

Answer: **890**

Question 29

40 cao **B1**

Answer: **40**

Question 30

403,439, 374,913, 363,062, 356,260 cao **B1**

Answer: **403,439, 374,913, 363,062, 356,260**

Question 31

10 cao **B1**

Answer: **10**

Question 32

318,706, 299,905, 288,516, 282,424 cao **B1**

Answer: **318,706, 299,905, 288,516, 282,424**

Question 33

9,060 seen **M1**

118 cao **A1**

Answer: **118**

Question 34

70 cao **B1**

Answer: **70**

Question 35

8,432 cao **B1**

Answer: **8,432**

© Revision Library | revisionlibrary.co.uk