1.11 Reasoning: Number and Calculation: 2-hour Pack

Calculators not allowed · about 120 minutes

Total Marks

Name: _____ Date: ____ / ____ / _____

Answer ALL questions. Show all your working.

1 Plants cost £5.68 each. Layla buys 3.

How much does Layla pay?

Answer: £___

(2)

---

2 Quinn has 152 coins. Quinn gives 2/8 of them to a friend.

How many coins does Quinn give to the friend?

Answer: ___

(2)

---

3 Notebooks cost £2.80 each. Ravi buys 6.

How much does Ravi pay?

Answer: £___

(1)

© Revision Library | revisionlibrary.co.uk

4 Femi has 9 boxes with 5,111 stickers in each box and 21,020 loose stickers.

How many stickers does Femi have altogether?

Answer: ___

(2)

---

5 Callum has 4 boxes with 32,487 beads in each box and 87,028 loose beads.

How many beads does Callum have altogether?

Answer: ___

(2)

---

6 Each box has 31 spaces. There are 232 eggs to carry.

What is the smallest number of boxes needed?

Answer: ___

(2)

---

7 In a sale, a ruler set costs £65. The price is reduced by 75%.

What is the sale price?

Answer: £___

(2)

© Revision Library | revisionlibrary.co.uk

8 Priya has eight 250 g bars of chocolate and three 120 g bars. She melts all the chocolate and pours it into 100 g moulds. How many full moulds can she fill?

(2)

---

9 Kofi has 73,459 coins. Kofi is given 35,985 more and then gives away 38,556.

How many coins does Kofi have now?

Answer: ___

(2)

---

10 Layla eats 3/12 of a cake on Monday and 6/12 on Tuesday.

What fraction of the cake is left? Give your answer in its simplest form.

Answer: ___

(2)

---

11 Victor has 40 pencils. Victor gives 7/8 of them to a friend.

How many pencils does Victor give to the friend?

Answer: ___

(1)

© Revision Library | revisionlibrary.co.uk

12 Write all the common factors of 8 and 44.

Answer: ___

(2)

---

13 Notebooks cost £1.43 each. Kiran buys 12 and pays with £20.

How much change does Kiran get?

Answer: £___

(2)

---

14 Books cost £2.24 each. Oscar buys 10 and pays with £40.

How much change does Oscar get?

Answer: £___

(2)

---

15 Books cost £3.93 each. Amira buys 11.

How much does Amira pay?

Answer: £___

(2)

© Revision Library | revisionlibrary.co.uk

16 Zara has 2 boxes with 29,872 marbles in each box and 32,500 loose marbles.

How many marbles does Zara have altogether?

Answer: ___

(2)

---

17 A zoo had 3,202 visitors in May and 3,462 visitors in June.

How many visitors did it have altogether?

Answer: ___

(2)

---

18 Isla has 92,114 marbles. Isla is given 3,087 more and then gives away 53,314.

How many marbles does Isla have now?

Answer: ___

(2)

---

19 Estimate 4,423 + 2,134 by rounding each number to the nearest 1,000 first.

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

20 A museum had 6,372 visitors on Saturday and 5,236 visitors on Sunday.

How many more visitors came on the busier day?

Answer: ___

(2)

---

21 Tom has 20,893 marbles. Tom puts 19,789 aside and shares the rest equally between 8 friends.

How many marbles does each friend get?

Answer: ___

(2)

---

22 Is 62 a prime number? Write Yes or No.

Answer: ___

(2)

---

23 Use each of the digits 5, 4, 3, 1 once to make the smallest possible 4-digit number.

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

24 Jack eats 1/8 of a cake on Monday and 1/8 on Tuesday.

What fraction of the cake is left? Give your answer in its simplest form.

Answer: ___

(2)

---

25 Estimate 4,632 - 1,874 by rounding each number to the nearest 1,000 first.

Answer: ___

(2)

---

26 A festival had 7,403 visitors in May and 9,257 visitors in June.

How many visitors did it have altogether?

Answer: ___

(2)

---

27 Toys cost £7.99 each. George buys 5 and pays with £40.

How much change does George get?

Answer: £___

(2)

© Revision Library | revisionlibrary.co.uk

28 Estimate 5,481 - 2,334 by rounding each number to the nearest 1,000 first.

Answer: ___

(2)

---

29 In a sale, a T-shirt costs £95. The price is reduced by 10%.

How much is the reduction?

Answer: £___

(2)

---

30 Each taxi has 13 seats. There are 392 people to carry.

What is the smallest number of taxis needed?

Answer: ___

(2)

---

31 Use each of the digits 8, 3, 7, 4 once to make the largest possible 4-digit number.

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

32 Yusuf eats 2/6 of a tray of flapjacks on Monday and 3/6 on Tuesday.

What fraction of the tray of flapjacks is left? Give your answer in its simplest form.

Answer: ___

(2)

---

33 Layla has 18,188 cards. Layla is given 48,287 more and then gives away 41,254.

How many cards does Layla have now?

Answer: ___

(2)

---

34 Mia pays a deposit of 5% on a T-shirt that costs £125. The rest is paid later.

How much is paid later?

Answer: £___

(3)

---

35 Reece has 93,187 beads. Reece is given 21,111 more and then gives away 73,558.

How many beads does Reece have now?

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

36 Use each of the digits 6, 3, 1, 2 once to make the largest possible 4-digit number.

Answer: ___

(1)

---

37 Each box has 43 spaces. There are 352 eggs to carry.

What is the smallest number of boxes needed?

Answer: ___

(2)

---

38 Estimate 9,894 - 4,577 by rounding each number to the nearest 1,000 first.

Answer: ___

(2)

---

39 Tickets cost £2.83 each. Ivan buys 8 and pays with £40.

How much change does Ivan get?

Answer: £___

(2)

© Revision Library | revisionlibrary.co.uk

40 Jack has 96 cards. Jack gives 4/8 of them to a friend.

How many cards does Jack give to the friend?

Answer: ___

(2)

---

41 Noah has 60 apples. Noah gives 1/3 of them to a friend.

How many apples does Noah give to the friend?

Answer: ___

(2)

---

42 Write all the common factors of 44 and 48.

Answer: ___

(2)

---

43 Kiran has 41,612 cards. Kiran puts 39,806 aside and shares the rest equally between 7 friends.

How many cards does each friend get?

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

44 A stadium had 1,586 fans on Saturday and 7,640 fans on Sunday.

How many more fans came on the busier day?

Answer: ___

(2)

---

45 Yusuf has 6,574 beads. Yusuf is given 16,175 more and then gives away 2,405.

How many beads does Yusuf have now?

Answer: ___

(2)

---

46 Work out 3/4 of £64.

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

47 A stadium had 5,679 fans in May and 7,165 fans in June.

How many fans did it have altogether?

Answer: ___

(2)

---

48 Estimate 2,999 + 2,444 by rounding each number to the nearest 1,000 first.

Answer: ___

(2)

© Revision Library | revisionlibrary.co.uk

Mark scheme · 1.11 Reasoning: Number and Calculation: 2-hour Pack

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

Question 1

5.68 x 3 method seen	M1
£17.04 cao	A1

Answer: **£17.04**

Question 2

152 divided by 8 = 19 seen	M1
38 cao	A1

Answer: **38**

Question 3

£16.80 cao	B1

Answer: **£16.80**

Question 4

9 x 5,111 = 45,999 seen	M1
67,019 cao	A1

Answer: **67,019**

Question 5

4 x 32,487 = 129,948 seen	M1
216,976 cao	A1

Answer: **216,976**

Question 6

232 / 31 = 7 remainder 15 seen	M1
8 cao	A1

Answer: **8**

Question 7

reduction found	M1
£16.25 cao	A1

Answer: **£16.25**

Question 8

Correct total mass: 8 x 250 + 3 x 120 = 2,000 + 360 = 2,360 g	M1
Number of 100 g moulds 2,360 / 100 = 23 full moulds cao	B1

Answer: **23 moulds**

Question 9

109,444 seen	M1
70,888 cao	A1

Answer: **70,888**

Question 10

9/12 eaten seen	M1
1/4 cao	A1

Answer: **1/4**

Question 11

35 cao	B1

Answer: **35**

Question 12

lists the factors of each number	M1
1, 2, 4 cao	A1

Answer: **1, 2, 4**

Question 13

1.43 x 12 = 17.16 seen	M1
£2.84 cao	A1

Answer: **£2.84**

Question 14

2.24 x 10 = 22.40 seen	M1
£17.60 cao	A1

Answer: **£17.60**

Question 15

3.93 x 11 method seen	M1
£43.23 cao	A1

Answer: **£43.23**

Question 16

2 x 29,872 = 59,744 seen	M1
92,244 cao	A1

Answer: **92,244**

Question 17

addition method seen	M1
6,664 cao	A1

Answer: **6,664**

Question 18

95,201 seen	M1
41,887 cao	A1

Answer: **41,887**

Question 19

4,000 and 2,000 seen	M1
6,000 cao	A1

Answer: **6,000**

Question 20

subtraction method seen	M1
1,136 cao	A1

Answer: **1,136**

Question 21

1,104 seen	M1
138 cao	A1

Answer: **138**

© Revision Library | revisionlibrary.co.uk

Question 22

gives a factor if not prime	M1
No cao	A1

Answer: **No**

Question 23

digits placed in value order	M1
1,345 cao	A1

Answer: **1,345**

Question 24

2/8 eaten seen	M1
3/4 cao	A1

Answer: **3/4**

Question 25

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

Answer: **3,000**

Question 26

addition method seen	M1
16,660 cao	A1

Answer: **16,660**

Question 27

7.99 x 5 = 39.95 seen	M1
£0.05 cao	A1

Answer: **£0.05**

Question 28

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

Answer: **3,000**

Question 29

method for the percentage	M1
£9.50 cao	A1

Answer: **£9.50**

Question 30

392 / 13 = 30 remainder 2 seen	M1
31 cao	A1

Answer: **31**

Question 31

digits placed in value order	M1
8,743 cao	A1

Answer: **8,743**

Question 32

5/6 eaten seen	M1
1/6 cao	A1

Answer: **1/6**

Question 33

66,475 seen	M1
25,221 cao	A1

Answer: **25,221**

Question 34

deposit found	M1
subtraction	M1
£118.75 cao	A1

Answer: **£118.75**

Question 35

114,298 seen	M1
40,740 cao	A1

Answer: **40,740**

Question 36

6,321 cao	B1

Answer: **6,321**

Question 37

352 / 43 = 8 remainder 8 seen	M1
9 cao	A1

Answer: **9**

Question 38

10,000 and 5,000 seen	M1
5,000 cao	A1

Answer: **5,000**

Question 39

2.83 x 8 = 22.64 seen	M1
£17.36 cao	A1

Answer: **£17.36**

Question 40

96 divided by 8 = 12 seen	M1
48 cao	A1

Answer: **48**

Question 41

divides by the denominator	M1
20 cao	A1

Answer: **20**

Question 42

lists the factors of each number	M1
1, 2, 4 cao	A1

Answer: **1, 2, 4**

Question 43

1,806 seen	M1
258 cao	A1

Answer: **258**

© Revision Library | revisionlibrary.co.uk

Question 44

subtraction method seen	**M1**
6,054 cao	**A1**

Answer: **6,054**

Question 45

22,749 seen	**M1**
20,344 cao	**A1**

Answer: **20,344**

Question 46

64 divided by 4 = 16 seen	**M1**
£48 cao	**A1**

Answer: **£48**

Question 47

addition method seen	**M1**
12,844 cao	**A1**

Answer: **12,844**

Question 48

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

Answer: **5,000**

© Revision Library | revisionlibrary.co.uk