4.1 Reasoning: Fractions, Decimals and Percentages: 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 What is the value of the digit 2 in 7.219?

Answer: ___

(1)

---

2 A bottle holds 8.9 litres. How many litres are there in 9 bottles?

Answer: ___ litres

(2)

---

3 1/6 of the bricks in a jar is 11. How many bricks are in the jar?

Answer: ___

(2)

---

4 Round 43.457 to 1 decimal place.

Answer: ___

(1)

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5 A plank is 2.4 metres. How many metres are there in 8 planks?

Answer: ___ metres

(1)

---

6 Write 6 4/10 as an improper fraction.

Answer: ___

(2)

---

7 Write 0.12 as a percentage.

Answer: ___ %

(2)

---

8 What percentage of 40 is 10?

Answer: ___ %

(1)

---

9 George scored 4 out of 40 in a test.

Write this score as a percentage.

Answer: ___ %

(2)

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10 Write 1 5/8 as an improper fraction.

Answer: ___

(2)

---

11 Jade eats 3/8 of a cake on Monday and 4/8 on Tuesday.

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

Answer: ___

(2)

---

12 2/6 = 8/___

Answer: ___

(1)

---

13 Write these fractions in order, starting with the smallest.

1/12, 3/6, 1/3

Answer: ___

(1)

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14 In a sale, a toy costs £110. The price is reduced by 40%.

What is the sale price?

Answer: £___

(3)

---

15 Round 148.54 to the nearest whole number.

Answer: ___

(1)

---

16 What decimal is made from 4 ones, 8 tenths, 1 hundredths and 5 thousandths?

Answer: ___

(1)

---

17 Work out 1/3 of £48.

Answer: ___

(1)

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18 Tom eats 1/4 of a cake on Monday and 2/4 on Tuesday.

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

Answer: ___

(2)

---

19 A jacket normally costs £68. In a sale it is reduced by 15%. Calculate the sale price of the jacket.

(3)

---

20 What is the value of the digit 5 in 6.253?

Answer: ___

(1)

---

21 Write 15/6 as a mixed number.

Answer: ___

(2)

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22 Write 0.5 as a percentage.

Answer: ___ %

(2)

---

23 Work out 75% of 108 m.

Answer: ___

(1)

---

24 Write 15/4 as a mixed number.

Answer: ___

(2)

---

25 3/4 of the flowers in a jar is 15. How many flowers are in the jar?

Answer: ___

(2)

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26 Write <, > or = in the box.

1/3 [ ] 3/8

Answer: ___

(2)

---

27 A school has 200 pupils. 35% of the pupils walk to school, 1/4 of the pupils travel by car, and the rest travel by bus.

(a) How many pupils walk to school? **(1)**

.....

(b) How many pupils travel by car? **(1)**

.....

(c) How many pupils travel by bus? **(1)**

.....

---

28 Write these decimals in order, starting with the smallest.

1.812, 1.633, 1.850, 1.893

Answer: ___

(1)

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Mark scheme · 4.1 Reasoning: Fractions, Decimals and Percentages: 1-hour Pack

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

Question 1

0.2 cao	B1

Answer: **0.2**

Question 2

multiplication seen	M1
80.1 litres cao	A1

Answer: **80.1 litres**

Question 3

11 x 6 seen	M1
66 cao	A1

Answer: **66**

Question 4

43.5 cao	B1

Answer: **43.5**

Question 5

19.2 metres cao	B1

Answer: **19.2 metres**

Question 6

method seen	M1
64/10 cao	A1

Answer: **64/10**

Question 7

method seen	M1
12% cao	A1

Answer: **12%**

Question 8

25% cao	B1

Answer: **25%**

Question 9

converts to a fraction out of 100	M1
10% cao	A1

Answer: **10%**

Question 10

method seen	M1
13/8 cao	A1

Answer: **13/8**

Question 11

7/8 eaten seen	M1
1/8 cao	A1

Answer: **1/8**

Question 12

24 cao	B1

Answer: **24**

Question 13

1/12, 1/3, 3/6 cao	B1

Answer: **1/12, 1/3, 3/6**

Question 14

reduction found	M1
subtracts from the original price	M1
£66 cao	A1

Answer: **£66**

Question 15

149 cao	B1

Answer: **149**

Question 16

4.815 cao	B1

Answer: **4.815**

Question 17

£16 cao	B1

Answer: **£16**

Question 18

3/4 eaten seen	M1
1/4 cao	A1

Answer: **1/4**

Question 19

finds 10% of 68 = 6.80 and 5% of 68 = 3.40 oe	M1
15% of 68 = 10.20, ft	M1
£57.80 cao	A1

Answer: **£57.80**

Question 20

0.05 cao	B1

Answer: **0.05**

Question 21

method seen	M1
2 3/6 cao	A1

Answer: **2 3/6**

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Question 22

method seen	M1
50% cao	A1

Answer: **50%**

Question 23

81 m cao	B1

Answer: **81 m**

Question 24

method seen	M1
3 3/4 cao	A1

Answer: **3 3/4**

Question 25

15 / 3 = 5 seen	M1
20 cao	A1

Answer: **20**

Question 26

common denominator seen	M1
< cao	A1

Answer: **<**

Question 27

(a) 70 cao	B1

(a) Answer: **70**

(b) 50 cao	B1

(b) Answer: **50**

(c) 80 cao, ft from parts (a) and (b)	B1

(c) Answer: **80**

Question 28

1.633, 1.812, 1.850, 1.893 cao	B1

Answer: **1.633, 1.812, 1.850, 1.893**

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