



Subject: Grade 6 Mathematics

Topic: Mathematics: Term 2 - Exam 1

Total: 107 Marks

1. true

2 marks

Explanation:

$$\frac{11}{13} \times \frac{11}{11} = \frac{121}{143}$$

2. B: 430

4 marks

Explanation:

$$394 - 98 = 296$$

$$296 + 134 = 430$$

3. 20 | 30 | 16

6 marks

Explanation:

1. $20 \div 20 = 1$

20 is a factor of 20.

2. $30 \div 15 = 2$

15 is a factor of 30.

3. $16 \div 8 = 2$

8 is a factor of 16.

4. true

2 marks

Explanation:

The x -axis is always named first and then the y -axis.

The purple dot is located at 3, 5.

5. whole | zero

4 marks

Explanation:

(1) 'a' and 'b' need to be whole numbers before $\frac{a}{b}$ can be called a rational number.

(2) A denominator can't be 0.

6. B: $5\frac{3}{8}$

4 marks

Explanation:

$$3\frac{1}{8} + 2\frac{1}{4} = 3\frac{1}{8} + 2\frac{2}{8}$$

$$= 3 + 2 + \frac{1}{8} + \frac{2}{8}$$

$$= 5\frac{3}{8}$$

7. 13

3 marks

Explanation:

shirts: $5 \times 250\text{g} = 1\,250\text{g}$

sheets: $2 \times 500\text{g} = 1\,000\text{g}$

pairs of socks: $3 \times 50\text{g} = 150\text{g}$

5kg = 5 000g

$5\,000\text{g} - 1\,250\text{g} - 1\,000\text{g} - 150\text{g} = 2\,600\text{g}$

$2\,600\text{g} \div 200\text{g} = 13$

8. 14 | 20

4 marks

Explanation:

Day 3 is the red graph and it shows 14°C.

Day 7 is the blue graph and it shows 20°C.

9. gross | net | R6 375

6 marks

Explanation:

1. Their income before any deductions was R22 250.

2. Their income after all deductions was R15 875.

3. $R22\,250 - R15\,875 = R6\,375$

10. false

2 marks

Explanation:

$$48\,053 + 23\,872 = 71\,925$$

$$72\,935 - 23\,872 = 49\,063$$

11. D: 13,26

4 marks

Explanation:

$$\frac{13}{50} \times \frac{2}{2} = \frac{26}{100}$$

$$= 26 \div 100$$

$$= 0,26$$

Now:

$$13 + \frac{13}{50} = 13 + 0,26$$

$$= 13,26$$

12. 9 | nine

3 marks

Explanation:

$$y + 6 = 15$$

$$y = 15 - 6$$

$$y = 9$$

13. A: 4

4 marks

Explanation:

$$8 \times 3 \div c$$

$$24 \div 6 = 4$$

14. 12 | twelve

3 marks

Explanation:

First multiple: $12 \times 1 = 12$

15. 25 | 60

4 marks

Explanation:

Monday: 25 burgers
Tuesday: 30 burgers
Wednesday: 45 burgers
Thursday: 60 burgers
Friday: 15 burgers

16. 20 | 8 | 8

6 marks

Explanation:

$$848 \div 42 = 20 \text{ rem } 8$$

To check your answer:
 $(42 \times 20) + 8 = 848$

17. true

2 marks

Explanation:

The x-axis is always named first and then the y-axis.

The soccer ball is located at 9, 6.

18. 10 | 3 | 8

6 marks

Explanation:

1. $10 \times 2 = 20$

20 is a multiple of 10.

2. $3 \times 5 = 15$

15 is a multiple of 3.

3. $8 \times 1 = 8$

8 is a multiple of 8.

19. 6,824 | 6, 824

3 marks

Explanation:

Full:

$$\begin{aligned} 853\text{g} \times 8 &= 6\,824\text{g} \\ &= 6,824\text{kg} \end{aligned}$$

20. 2 | two

3 marks

Explanation:

Factors of 19: 1 and 19

No other numbers can divide into 19 without a remainder.

Therefore, 19 has two factors only.

21. 25

3 marks

Explanation:

$$\frac{1}{12} \text{ of } 60: \quad 60 \div 12 \quad = 5$$

$$\frac{5}{12} \text{ of } 60: \quad 5 \times 5 \quad = 25$$

Therefore, 25 oranges were damaged.

22. 38

3 marks

Explanation:

$$d + 87 = 125$$

$$d = 125 - 87$$

$$d = 38$$

23. 37,5 | 37,5°C

3 marks

Explanation:

36,7 + 0,8 :

$$0,7 + 0,8 = 1,5$$

The tenths column is full and 1 is carried over to the units column.

$$36 + 1,5 = 37,5$$

When writing decimal numbers, or rands and cents, you must use a comma and not a full stop.

24. true

2 marks

Explanation:

The x -axis is always named first and then the y -axis.

The tennis ball is located at 2, 3.

25. 1 064

3 marks

Explanation:

divisor \times quotient + remainder = dividend

Therefore:

$$25 \times 42 + 14 = 1\ 064$$

26. A: 20

4 marks

Explanation:

Nassir graph goes to 20, therefore he collected 20 bottles.

27. D: 3 005 litres

4 marks

Explanation:

3kl = 3 000 litres

$$3\ 000\ \text{litres} + 5\ \text{litres} = 3\ 005\ \text{litres}$$

28. true

2 marks

Explanation:

$$\frac{16}{3} = 16 \div 3$$

$$= 5\ \text{rem.}\ 1$$

$$= 5\frac{1}{3}$$

29. D: 99; 180; 504; 801

4 marks

Explanation:

$$99 \div 9 = 11$$

If the sum of the digits of a number is divisible by 9, then the number itself is divisible by 9.

Add up the digits of the numbers:

$$99: 9 + 9 = 18$$

$$109: 1 + 0 + 9 = 10$$

$$180: 1 + 8 + 0 = 9$$

$$504: 5 + 0 + 4 = 9$$

$$891: 8 + 9 + 1 = 18$$

9 and 18 is divisible by 9, therefore too are 99, 180, 504 and 891!

30. B: 4, 852

4 marks

Explanation:

Without a calculation, the number moves three spaces to the left.

