

Revision

Arithmetic

Questions

1) Eighteen thousandths, written as a decimal is:

- a. 0.0018
$$\frac{18}{1000} = 0.018$$
- b. 0.018
- c. 0.18

2) 40 divided by $\frac{1}{8}$ is equal to:

- a. 5
$$\frac{40}{\frac{1}{8}} = 40 \times \frac{8}{1} = 320$$
- b. 320
- c. $\frac{1}{5}$

3) The next number in the sequence 1, 3, 6, 10 is:

- a. 11
$$10+5=15$$
- b. 13
- c. 15

4) The value of $[-1] - (-1)$ is:

- a. -2
$$[-1+1]-1=[0]-1=-1$$
- b. -1
- c. 0

5) $7 \times 6 - 12 \div 3 + 1$ is equal to:

(a) 39

b. 28

c. -44

6) If £182.50 is shared equally between 5 people, how much would each person receive:

a. £35.50

$$\begin{array}{r} 36.5 \\ 5) 182.5 \\ \hline 15 \\ \hline 32 \\ \hline 30 \\ \hline 25 \end{array}$$

b. £37.50

(c) £36.50

7) The arithmetic mean of ten numbers is 36. If one of the numbers is 18, what is the mean of the other nine.

a. 32

$$\frac{\text{Sum of ten numbers}}{10} = 36$$

One of the numbers
is 18

b. 36

Sum of ten numbers = 360

(c) 38

Sum of ten numbers - 18 = Sum of nine other numbers

$360 - 18 = 342$

The mean of nine = $\frac{342}{9} = 38$

8) Three thousand and forty nine written in numbers is:

a. 3,490

b. 30049

(c) 3049

9) If the fractions $\frac{2}{5}$, $\frac{3}{7}$ and $\frac{1}{3}$ arranged in order of size, smallest first, the order would be:

a. $\frac{2}{5}, \frac{1}{3}, \frac{3}{7}$

$$\frac{2}{5} \times \frac{21}{21} = \frac{42}{105} = \frac{2}{5}$$

(b) $\frac{1}{3}, \frac{2}{5}, \frac{3}{7}$

$$\frac{3}{7} \times \frac{15}{15} = \frac{45}{105} = \frac{3}{7}$$

c. $\frac{3}{7}, \frac{2}{5}, \frac{1}{3}$

$$\frac{1}{3} \times \frac{35}{35} = \frac{35}{105} = \frac{1}{3}$$

10) $3\frac{2}{3} + 4\frac{3}{5}$ is equal to:

a. $7\frac{1}{3}$

b. $6\frac{13}{15}$

c. $8\frac{4}{15}$

$$\begin{aligned}
 3 + \frac{2}{3} + 4 + \frac{3}{5} \\
 7 + \frac{2}{3} + \frac{3}{5} = 7 + \frac{2}{3} \times \frac{5}{5} + \frac{3}{5} \times \frac{3}{3} \\
 = 7 + \frac{10}{15} + \frac{9}{15} \\
 = 7 + \frac{19}{15} = 7 + 1 + \frac{4}{15} = 8\frac{4}{15}
 \end{aligned}$$

 11) $2\frac{1}{2} \times 1\frac{1}{3}$ is equal to:

a. $2\frac{1}{5}$

b. $2\frac{1}{6}$

c. $3\frac{1}{3}$

$$\frac{2 \times 2 + 1}{2} \times \frac{1 \times 3 + 1}{3} = \frac{5}{2} \times \frac{4}{3} = \frac{20}{6} = \frac{10}{3} = 3\frac{1}{3}$$

 12) $\frac{5}{6} \div \frac{1}{3}$ is equal to:

a. $\frac{5}{2}$

b. $\frac{5}{18}$

c. $2\frac{1}{2}$

$$\cancel{\frac{5}{6}} \times \cancel{\frac{3}{1}} = \frac{5}{2}$$

TWO of the answers are correct

13) The number 46700 when written in Standard Form is:

a. 46.7×10^3

b. 4.67×10^4

c. 4.67×10^5

14) When written in Standard Form 0.00075 is equal to:

a. 75×10^{-5}

b. 7.5×10^{-4}

c. 0.75×10^{-3}

15) $3 \times 10^2 \times 2 \times 10^4$ is equal to:

a. 6×10^8

b. 6×10^6

c. 6×10^{-2}

16) $4 \times 10^6 \div 2 \times 10^3$ is equal to:

$$\frac{4 \times 10^6}{2 \times 10^3} = 2 \times 10^{6-3} = 2 \times 10^3$$

a. 2×10^2

b. 2×10^3

c. 2×10^{-3}

17) Which of the following is a prime number:

a. $15/3 = 5$ $15/5 = 3$

b. $27/3 = 9$ $27/9 = 3$

c. 41

18) 2, 3 and 5 are the factors of :

a. 6

b. 10

c. 30

19) The HCF of 20, 30 and 60 is:

- a. 2
 b. 10
 c. 20

20) The LCM of 2, 4, 5 and 6 is:

- a. 240
 b. 60
 c. 6

21) If 1 km = 0.6 miles, then 66 miles is equivalent to:

- a. 110 km
$$\frac{66}{0.6} = \frac{660}{6} = 110 \text{ km}$$

 b. 1100km
 c. 11km

22) If £120 is divided in the ratio 2 : 3, then the larger share is:

- a. £48
$$2+3=5 \text{ the sum shares}$$

 b. £80
$$\frac{120}{5} = 24 \text{ for each share}$$

 c. £72
$$\text{The large share is proportional to } 3$$

$$\text{so } 3 \times 24 = 72$$

23) If 50% of a certain length is 500mm, the complete length is:

- a. 250mm
 b. 1000mm
 c. 100mm

24) What is the square root of 16×64 :

a. 40

$$\sqrt{16 \times 64} = \sqrt{16} \times \sqrt{64} = 4 \times 8 = 32$$

b. 32

c. 256

25) The difference between 2^3 and 3^2 is:

a. 9

$$2^3 = 8 = 2 \times 2 \times 2$$

b. 1

$$3^2 = 3 \times 3 = 9$$

c. 17

$$9 - 8 = 1$$

26) What is 0.0059 correct to 2 decimal places:

a. 0.01

$$0.0059 = 0.01$$

b. 0.10

c. 0.006

27) Correct to 2 significant figures 3.0394 is:

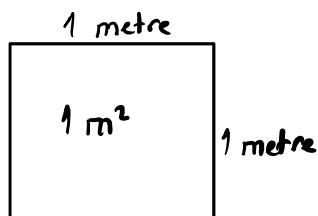
a. 3.0

b. 3.04

c. 3.03

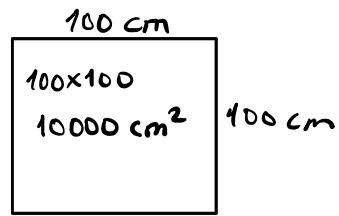
28) How many square centimetres are there in a square metre:

a. 100



b. 1000

c. 10,000

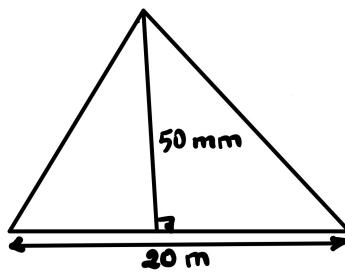


- 29) A triangle has an altitude of 50mm and a base of 20mm. Its area is:

a. 250mm^2

b. 0.25cm^2

c. 500mm^2



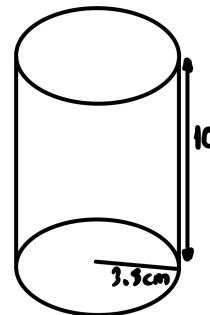
$$\frac{50 \times 20}{2} = 500 \text{ mm}^2$$

- 30) Oil is sold in a closed cylindrical container whose diameter is 7cm and whose height is 10cm. How much oil does the can hold:

a. Less than 0.4 litres

b. 0.5 litres

c. More than 1 litre



$V = \text{Area of the circle} \times \text{height}$

$$V = \pi r^2 \times h$$

$$V = \frac{22}{7} \times (3.5)^2 \times 10$$

$$V = \frac{22}{7} \times \left(\frac{7}{2}\right)^2 \times 10$$

$$V = \frac{22}{4} \times 70 = 385 \text{ cm}^3$$

1000 cm^3 can hold a litre

Revision

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Answers

- | | |
|--------------|--------------|
| 1. B | 21. A |
| 2. B | 22. C |
| 3. C | 23. B |
| 4. B | 24. B |
| 5. A | 25. B |
| 6. C | 26. A |
| 7. C | 27. A |
| 8. C | 28. C |
| 9. B | 29. C |
| 10. C | 30. A |
| 11. C | |
| 12. C | |
| 13. B | |
| 14. B | |
| 15. B | |
| 16. B | |
| 17. C | |
| 18. C | |
| 19. B | |
| 20. B | |