

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 $[(-1) - (-1)] - 1$ is:

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

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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
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
b. 36
c. 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. $\frac{2}{5}, \frac{1}{3}, \frac{3}{7}$
b. $\frac{1}{3}, \frac{2}{5}, \frac{3}{7}$
c. $\frac{3}{7}, \frac{2}{5}, \frac{1}{3}$

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

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

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

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

$$3 + \frac{2}{3} + 4 + \frac{3}{5}$$

$$7 + \frac{2}{3} + \frac{3}{5} = 7 + \frac{2}{3} \times \frac{5}{5} + \frac{3}{5} \times \frac{3}{3}$$

$$= 7 + \frac{10}{15} + \frac{9}{15}$$

$$= 7 + \frac{19}{15} = 7 + 1 + \frac{4}{15} = 8\frac{4}{15}$$

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

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

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
- b. 1100km
- c. 11km

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

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

- a. £48
- b. £80
- ☒ c. £72

$2+3=5$ the sum shares

$$\frac{120}{5} = 24 \text{ for each share}$$

The large share is proportional to 3
so $3 \times 24 = 72$

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

- a. 250mm
- ☒ b. 1000mm
- c. 100mm

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

- a. 40
- ☒ b. 32
- c. 256

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

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

- a. 9
- ☒ b. 1
- c. 17

$$\begin{aligned} 2^3 &= 8 = 2 \times 2 \times 2 \\ 3^2 &= 3 \times 3 = 9 \\ 9 - 8 &= 1 \end{aligned}$$

26) What is 0.0059 correct to 2 decimal places:

- ☒ a. 0.01
- b. 0.10
- c. 0.006

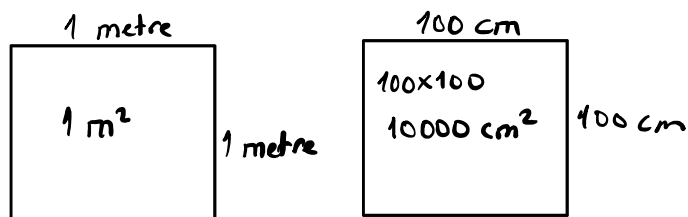
$$0.0059 = 0.01$$

27) Correct to 2 significant figures 3.0394 is:

- ☒ a. 3.0
- b. 3.04
- c. 3.03

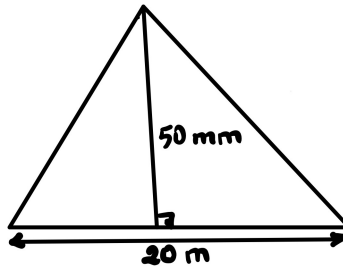
28) How many square centimetres are there in a square metre:

- a. 100
- b. 1000
- ☒ c. 10,000



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

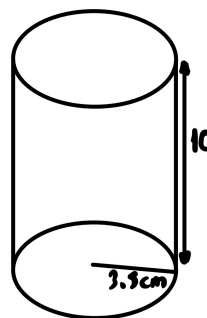
- a. 250mm²
b. 0.25cm²
c. 500mm²



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

- 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



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

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

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

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

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

1000 cm³ can hold a litre

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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 | |

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