

# ARITHMETIC TEST 1

1. What is 3754 to the nearest hundred?  
(A) 3700 (B) 3750  
(C) 3800 (D) 4000
2. The number 32747 written to four (4) significant figures is  
(A) 3274 (B) 3275  
(C) 32740 (D) 32750
3. Express in standard form 0.00368  
(A)  $3.68 \times 10^3$  (B)  $3.68 \times 10^2$   
(C)  $3.68 \times 10^{-2}$  (D)  $3.68 \times 10^{-3}$
4.  $29.94 \times 0.5$  is approximately equal to  
(A) 0.15 (B) 1.5 (C) 15 (D) 150
5.  $\sqrt{5.20}$  is approximately equal to  
(A)  $6.9 \times 10$  (B)  $7.2 \times 10$   
(C)  $2.3 \times 10$  (D)  $2.1 \times 10$
6. The decimal equivalent of  $\frac{7}{8}$  is  
(A) 0.125 (B) 0.7  
(C) 0.78 (D) 0.875
7. The value of  $\sqrt{\frac{0.09}{400}}$  is  
(A) 0.0015 (B) 0.015  
(C) 0.15 (D) 1.5
8. The number 0.0325 written to 2 significant figures is  
(A) 0.03 (B) 0.0325  
(C) 0.033 (D) 0.0325
9.  $11.1 \div 0.01 =$   
(A) 110 (B) 111  
(C) 1100 (D) 1110
10.  $(9.8)^2 - (0.2)^2 =$   
(A) 96.00 (B) 92.16  
(C) 81.60 (D) 9.60
11. If  $n = \frac{1}{0.25}$  then  $n =$   
(A) 0.04 (B) 0.25 (C) 4 (D) 400
12. 0.075 written as a fraction is  
(A)  $\frac{1}{4}$  (B)  $\frac{1}{2}$  (C)  $\frac{3}{4}$  (D)  $\frac{7}{8}$
13. In which of the following are the fractions arranged in ascending order?  
(A)  $\left\{\frac{1}{5}, \frac{1}{4}, \frac{1}{3}, \frac{1}{2}\right\}$   
(B)  $\left\{\frac{1}{2}, \frac{1}{4}, \frac{1}{3}, \frac{1}{5}\right\}$   
(C)  $\left\{\frac{1}{2}, \frac{1}{3}, \frac{1}{4}, \frac{1}{5}\right\}$   
(D)  $\left\{\frac{1}{5}, \frac{1}{3}, \frac{1}{4}, \frac{1}{2}\right\}$

14. If  $4.3 \times 0.37 = 1.591$  then  $0.43 \times 370 =$
- (A) 1.591 (B) 15.91  
(C) 159.1 (D) 1591.0
15.  $\frac{1}{3} \div 1\frac{1}{4} =$
- (A)  $\frac{5}{12}$  (B)  $\frac{12}{5}$   
(C)  $\frac{4}{15}$  (D)  $\frac{15}{4}$
16.  $\left(1\frac{1}{2}\right)^2 - 1\frac{1}{2} =$
- (A)  $1\frac{1}{2}$  (B)  $\frac{3}{4}$   
(C)  $\frac{1}{4}$  (D)  $1\frac{3}{4}$
17. If \$350 is divided into two portions in the ratio 2 : 3, the smaller portion is
- (A) \$70 (B) \$100 (C) \$175 (D) \$250
18. By the distributive law  $49 \times 17 + 3 \times 49 =$
- (A)  $49 + 20$  (B)  $49 \times 20$   
(C)  $52 + 66$  (D)  $52 \times 66$
19. Which of the following is rational
- (A)  $\sqrt{17}$  (B)  $\sqrt{\frac{36}{25}}$   
(C)  $\frac{8\pi}{4}$  (D)  $\frac{2}{\sqrt{5}}$
20.  $324_5$  Written in base 10 is
- (A) 9 (B) 45 (C) 89 (D) 95
21. \$75.00 is divided among three persons in the ratio 3 : 5 : 7. How much is the middle share?
- (A) \$25 (B) \$37.50  
(C) \$45 (D) \$53.56
22. If a car runs 160 km on 16 litres of gas, then on a full 40 litre-tank it should run :
- (A) 200 km (B) 216 km  
(C) 400 km (D) 640 km
23. The length of a lake is 8 km. The lake is represented on a map by a length of 2cm. The scale is
- (A) 1 : 4 (B) 1 : 2000  
(C) 1 : 200000 (D) 1 : 400000
24.  $213_n = 58_{10}$ , then  $n =$
- (A) 3 (B) 4 (C) 5 (D) 6
25. It took a speed-boat 9 hrs to travel a distance of 1080 km, what was its average speed?
- (A) 12 km/h (B) 102 km/h  
(C) 120 km/h (D) 1200 km/h
26. The first three common multiples of 3, 4 and 6 are
- (A) 3, 4, 6 (B) 0, 1, 2  
(C) 12, 24, 36 (D) 6, 8, 12
27. Which of the following is a prime no?
- (A) 252 (B) 255 (C) 257 (D) 261

28.  $\sqrt{0.000008} =$   
 (A) 0.002 (B) 0.004  
 (C) 0.02 (D) 0.04
29. A box is full of marbles. John removes  $\frac{1}{2}$  of the marbles and Paul removes  $\frac{1}{3}$  of the remainder. There were 20 marbles left. The total amount was  
 (A) 30 (B) 45 (C) 60 (D) 90
30. A man leaves home at 22 : 15hrs and reaches his destination at 04:00 hrs the following day. How many hrs did the journey take?  
 (A) 5 (B)  $5\frac{3}{4}$  (C) 6 (D)  $6\frac{1}{4}$
31. A model boat is made on a scale of 1 to 10. If the capacity of the actual boat is  $1000 \text{ cm}^3$ , what is the capacity of the model?  
 (A)  $1 \text{ m}^3$  (B)  $10 \text{ m}^3$   
 (C)  $100 \text{ m}^3$  (D)  $1000 \text{ m}^3$
32. Three lights flash at intervals of 4, 6 and 10 seconds respectively. They are started together. How soon after will they start flashing together?  
 (A) 40sec (B) 60 sec  
 (C) 120 sec (D) 240 sec
33. What is 5% of \$40?  
 (A) \$2 (B) \$8 (C) \$20 (D) \$35
34. If US\$1.00 = EC\$2.70, what is the value of US\$4.50 in EC currency?  
 (A) \$1.67 (B) \$6.00  
 (C) \$7.20 (D) \$12.15
35. A man bought a goat for \$400 and sold it for \$500. His percentage profit was  
 (A) 10 (B) 20 (C) 25 (D) 80
36. A dress which costs \$180 is sold at a discount of 10%. The discount is  
 (A) \$1.80 (B) \$18  
 (C) \$10 (D) \$170
37. The Simple interest on \$560 for 3 years at  $12\frac{1}{2}\%$  per annum is  
 (A) \$70 (B) \$210  
 (C) \$630 (D) \$770
38. An article costs \$1424. It may be purchased by depositing \$560 and making monthly payments of \$48. How many months are required to complete payments?  
 (A) 18 (B) 24 (C) 30 (D) 36
39. A man's annual salary is \$45000. His tax free allowances total \$13000. He has to pay a tax of 35% on his taxable income. The tax is  
 (A)  $\$ \frac{35 \times 13000}{100}$   
 (B)  $\$ \frac{35 \times 45000}{100}$   
 (C)  $\$ \frac{35 \times 45000}{100} - 13000$   
 (D)  $\$ \frac{35 \times (45000 - 13000)}{100}$
40. A radio valued at \$200 is marked up by 10%. At a sale, 10% is taken off the marked price. What was the final selling price of the radio?  
 (A) \$180 (B) \$198  
 (C) \$200 (D) \$220

41. In how many years would \$100 invested at 5% per annum Simple interest amount to \$160?  
 (A) 8 (B) 12 (C) 16 (D) 32

42. The interest on \$75 for 8 months was \$3. What was the rate of interest?

- (A)  $\frac{2}{3}\%$  (B)  $1\frac{1}{3}\%$   
 (C) 6% (D) 8%

43. An article was sold for \$375 at a profit of 25% on the cost price. The cost price was

- (A) \$300 (B) \$350  
 (C) \$400 (D) \$468.75

44. A man bought a car for \$22,400. After one year, it was worth \$18,480. The depreciation as a percentage of the cost price was

- (A) 9.6 (B) 17.5 (C) 21.2 (D) 39.2

45. A salesman is paid 5% of his sales as commission. His sales for last month were \$2020. How much commission was he paid?

- (A) \$11 (B) \$20.20  
 (C) \$101 (D) \$110

46. If the cost of insurance for goods valued at \$400 is \$10, what is the cost of insuring goods valued at \$80?

- (A) \$4 (B) \$5 (C) \$6 (D) \$8

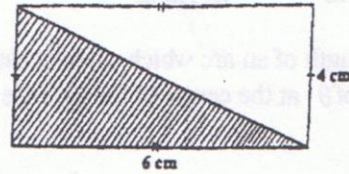
47. If six books which cost \$25 each are sold for \$120, then the loss % is

- (A) 15 (B) 20 (C) 25 (D) 30

48. Find the compound interest on \$600 for 2 yrs at 10% per annum.

- (A) \$132 (B) \$66  
 (C) \$120 (D) \$126

49. In the diagram below, the area of the shaded part of the rectangle is:



- (A)  $(6+4)cm^2$   
 (B)  $\left(\frac{6 \times 4}{2}\right)cm^2$   
 (C)  $(6+4+4+6)cm^2$   
 (D)  $(6 \times 4)cm^2$

50. In the diagram below the area of the shaded sector is



- (A)  $11.25 cm^2$  (B)  $13.5 cm^2$   
 (C)  $14 cm^2$  (D)  $22.50 cm^2$

51. The area of a circle is  $44 cm^2$ . What is the length of the radius in cm?

- (A) 2 (B) 4 (C) 7 (D)  $\sqrt{2}$

52. A rectangular field is 42 metres long and  $2x$  metres wide. Its perimeter is 288 metres. The value of  $x$  is

- (A) 24 m (B) 33 m  
(C) 36 m (D) 48 m

53. The length of an arc which subtends an angle of  $\theta$  at the centre of the circle is

- (A)  $\frac{\theta}{360} \times \pi r^2$  (B)  $\frac{\theta \times \pi r^2}{360}$   
(C)  $\frac{\theta}{360} \times 2\pi r$  (D)  $\frac{\theta}{360} \times 2\pi r^2$

$\frac{\theta}{360} \times 2\pi r^2$

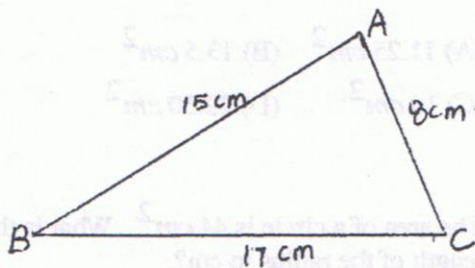
54. The perimeter of a square is 48 cm. What is its area in  $cm^2$

- (A) 144 (B) 108 (C) 72 (D) 36

55. How many litres of water would a container of  $10,000 cm^3$  hold?

- (A) 10 (B) 100 (C) 1000 (D) 10000

56.



What is the area of the triangle ABC?

- (A)  $20 cm^2$  (B)  $40 cm^2$   
(C)  $60 cm^2$  (D)  $68 cm^2$

57. How many Kg are in 1tonne?

- (A) 10 (B) 100 (C) 1000 (D) 10000

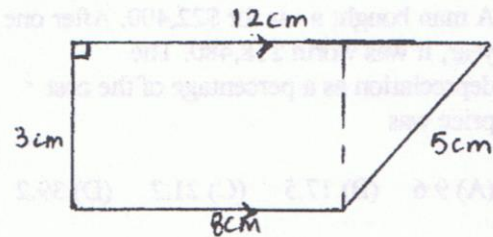
58. In the parallelogram ABCD,  $AB = 5$  cm,

$BC = 4$  cm and angle  $ABC = 56^\circ$ . What is the area of parallelogram ABCD?

\*See below for diagram

- (A)  $5 \sin 56^\circ$  (B)  $10 \sin 56^\circ$   
(C)  $20 \sin 56^\circ$  (D)  $40 \sin 56^\circ$

59. The area of the trapezium is



- (A)  $24 cm^2$  (B)  $28 cm^2$

- (C)  $30 cm^2$  (D)  $36 cm^2$

60. The radius of the large circle is 7cm and the radius of the small circle is 4 cm. The area, in  $cm^2$  of the shaded part is

- (A)  $3\pi$  (B)  $9\pi$  (C)  $22\pi$  (D)  $33\pi$

Diagram for no. 58

