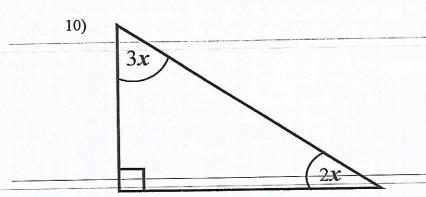
|    | In the number 567.8 the digit with the greatest value is              | 5) An item sells for \$300. It originally cost \$200. The profit as a percentage of the original cost is |  |  |
|----|---|--|--|--|
|    | (A) 5   |  |  |  |
|    | (B) 6   | (A) $33\frac{1}{3}\%$  |  |  |
|    | (C) 7   | (B) 50 %   |  |  |
|    | (D) 8   | (C) $66\frac{2}{3}\%$  |  |  |
|    |   | (D) 75 %   |  |  |
| 2) | The number nine thousand and nine written in                          |  |  |  |
|    | figures is  | 6) A television set can be bought for \$860 cash or  |  |  |
|    | (A) 9009  | on-hire purchase with \$100 down payment and 12 monthly instalments of \$70 each. The                    |  |  |
|    | (B) 9090  | amount that may be saved by buying the   |  |  |
|    | (C) 9099  | television for cash is   |  |  |
|    | (D) 9900  | (A) \$80   |  |  |
|    |   | (B) \$100  |  |  |
| 3) | The largest three digit number that can be                            | (C) \$940  |  |  |
|    | formed using all the digits 7, 9 and 4 is                             | (D) \$960  |  |  |
|    | (A) 479   |  |  |  |
|    | (B) 497   | 7) $5(x - y) - 5(y + x) =$   |  |  |
|    | (C) 749   | (1)  |  |  |
|    | (D) 974   | (A) - 10y  |  |  |
|    |   | (B) $6x - 6y$  |  |  |
| 4) | James eats $\frac{1}{10}$ of a cake, Jack eats $\frac{1}{2}$ and Mary | (C) $10x - 10y$  |  |  |
|    | eats $\frac{1}{4}$ . The uneaten fraction is                          | (D) 10y  |  |  |
|    | (A) $\frac{3}{20}$  | 8) If $-12 - 4(-2x) = 4$ , then $x =$  |  |  |
|    | (B) $\frac{3}{10}$  | (A) —10  |  |  |
|    | (C) $\frac{7}{10}$  | (B) —5   |  |  |
|    | (D) $\frac{17}{10}$   | (C) $-2$   |  |  |

(D) 2

- 9) When factorised completely the expression ax ay + bx by can be written as \_\_\_\_\_.
  - (A) (a-b)(x-y)
  - (B) (a+b)(x-y)
  - (C) (a-x)(b-y)
  - (D) (a+y)(b-x)



In this triangle, the value of x is \_\_\_\_\_.

- (A) 18°
- (B)  $36^{\circ}$
- (C) 90°
- (D) 180°
- 11)  $a^2 9b^2 =$ 
  - (A) (a-3b)(a-3b)
  - (B) (a-3b)(a+3b)
  - (C) (a-9b)(a+9b)
  - (D) (a-9b)(a-b)

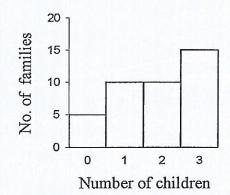
- 12) A boy receives three times as much allowance as his sister. Together they receive \$240. The girl's share is \_\_\_\_\_.
  - (A) \$20
  - (B) \$40
  - (C) \$60
  - (D) \$240
- 13) The scores obtained in a spelling competition are 5, 8, 9, 6, 9, 3, 5, 7, 9, 9 and 8.

  The modal score is \_\_\_\_\_.
  - (A) 4
  - (B) 7
  - (C) 8
  - (D) 9
- 14) The difference between the highest and lowest values in a distribution is called the
  - (A) mean
  - (B) median
  - (C) mode
  - (D) range

| Day of<br>the<br>Week | Mon. | Tue. | Wed. | Thu. | Fri. |
|-----------------------|------|------|------|------|------|
| Number<br>of          | 15   | 20   | 10   | 18   | 17   |
| Lunches               |      |      |      |      |      |

The table shows the number of lunches given to students in a class in a certain week. The mean number of lunches given per day is \_\_\_\_\_.

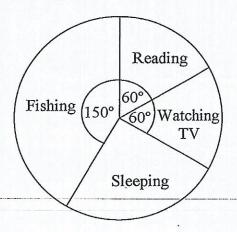
- (A) 15
- (B) 16
- (C) 17
- (D) 20
- 16) A census was conducted on the number of children per family in an apartment building in Trinidad. The data collected is shown in the histogram below.



The total number of children is \_\_\_\_

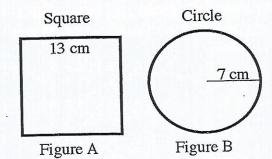
- (A) 6
- (B) 30
- (C) 40
- (D) 75

17) The diagram below shows a pie chart representing how Joan spent her Easter vacation.



What percentage of Joan's Easter vacation was spent sleeping?

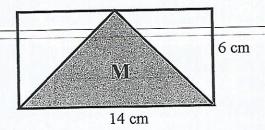
- (A) 25 %
- (B) 75 %
- (C) 90 %
- (D) 270 %
- 18) A class of 40 students sat a test, and 32 were successful. The probability of choosing a student at random who was **not** successful is
  - (A)  $\frac{1}{5}$
  - (B)  $\frac{1}{4}$
  - (C)  $\frac{3}{4}$
  - (D)  $\frac{4}{5}$
- 19) From 01:30 to 01:45, the minute hand of a clock rotates through an angle of \_\_\_\_\_.
  - (A)  $7\frac{1}{2}^{\circ}$
  - (B) 15°
  - (C)  $25^{\circ}$
  - (D) 90°



The difference between the areas of the two figures is \_\_\_\_\_.

- (A) area of A is larger by 6 cm<sup>2</sup>
- (B) area of A is larger by 8 cm<sup>2</sup>
- (C) areas of A and B are the same
- (D) area of A is larger by 15 cm<sup>2</sup>

21)



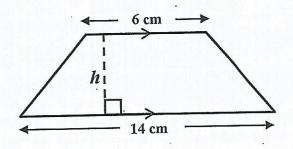
The triangle **M** is drawn in the rectangle as shown. What is the area of triangle **M**?

- (A)  $20 \text{ cm}^2$
- (B)  $28 \text{ cm}^2$
- (C)  $42 \text{ cm}^2$
- (D)  $84 \text{ cm}^2$

22) A cubical tank of side 2 m is filled with water which is poured into another cubical tank of side 8 m. The number of times this must be done to fill the larger tank is \_\_\_\_\_.

- (A) 4
- (B) 8
- (C) 16
- (D) 64

23) The diagram illustrates a trapezium of area 80 cm<sup>2</sup> with parallel sides of lengths 6 cm and 14 cm.



The height, h, is \_\_\_\_\_

- (A) 4 cm
- (B) 8 cm
- (C) 10 cm
- (D) 20 cm

24) 1 litre of paint covers an area of 48 m<sup>2</sup>. How much paint will be required to cover a rectangular wall 18 m by 8 m?

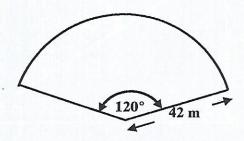
- (A) 2 litres
- (B) 3 litres
- (C) 5 litres
- (D) 6 litres

25) A 1-litre jug filled with water is used to fill two empty cups, each with a capacity of 420 cm<sup>3</sup>. What is the volume of water left in the jug?

- (A)  $160 \text{ cm}^3$
- (B)  $580 \text{ cm}^3$
- (C)  $840 \text{ cm}^3$
- (D)  $1420 \text{ cm}^3$

5

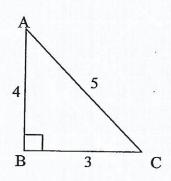
(46) The diagram below shows a flowerbed in the shape of a sector.



What is the **perimeter** of the flower bed with radius 42 m and sector angle 120°?

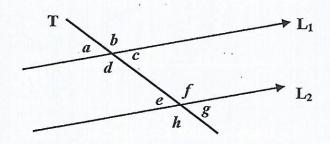
- (A) 44 m
- (B) 88 m
- (C) 130 m
- (D) 172 m

28)



In this triangle, sin C =

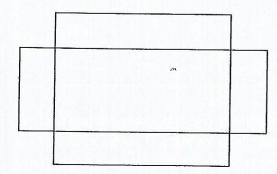
- (A)  $\frac{3}{5}$
- (B)  $\frac{3}{4}$
- (C)  $\frac{4}{5}$
- (D)  $\frac{5}{4}$
- 27) The diagram below shows two parallel lines, L<sub>1</sub> and L<sub>2</sub>, being intersected by the straight line T.



Angles b and f are called \_\_\_\_\_

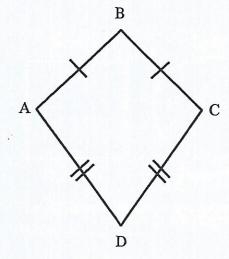
- (A) alternate angles
- (B) co-interior angles
- (C) corresponding angles
- (D) vertically opposite angles

29)

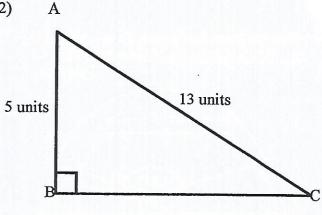


The diagram above shows the net of \_\_\_\_\_

- (A) a cube
- (B) an open box
- (C) an open cylinder
- (D) a pyramid



32)



Calculate the distance BC.

8 units

10 units

12 units

18 units

The quadrilateral **ABCD** has one axis of symmetry. The quadrilateral is a \_\_\_\_\_\_

- (A) kite
- (B) parallelogram
- (C) rhombus
- (D) trapezium

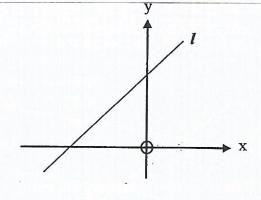
33)

(A)

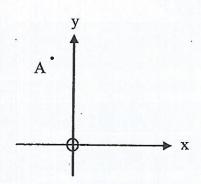
(B)

(C)

(D)



31)



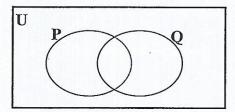
The point A, shown in the diagram, could be

- (A) (-1, -5)
- (B) (-1,5)
- (C) (1,-5)
- (D) (1,5)

The diagram shows a straight line, l. Which of the following points will lie on the line l?

- (A) (-3,2)
- (B) (0,-3)
- (C) (4,-2)
- (D) (5,0)

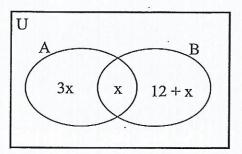
- 4) The set of multiples of 5 is \_\_\_\_
  - (A) {5, 25, 125}
  - (B)  $\{1, 2, 3, 4, 5\}$
  - (C)  $\{-5, -4, \dots, 4, 5\}$
  - (D) {5, 10, 15, 20, ...}
- 35) The set of prime factors of 6 is \_\_\_\_.
  - (A) {1, 3}
  - (B) {2, 3}
  - (C)  $\{2, 3, 6\}$
  - (D)  $\{1, 2, 3, 6\}$
- 36) If  $A = \{ \text{odd numbers from 1 to 10} \}$  and  $B = \{ \text{prime numbers from 1 to 10} \}$ , then  $A \cap B$  is
  - (A)  $\{3, 5, 7\}$
  - (B)  $\{2, 3, 5, 7\}$
  - (C)  $\{1, 2, 3, 5, 7\}$
  - (D) {1, 2, 3, 5, 7, 9}
- 37) If  $X = \{b, d, f\}$  and  $Y = \{b, c, d, e, f\}$  then
  - $(A) X = Y \dots$
  - (B)  $X \subset Y$
  - (C)  $Y \subset X$
  - (D)  $X \cap Y = \emptyset$



In the diagram above, the **unshaded** region represents \_\_\_\_\_.

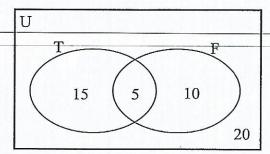
- (A)  $P \cup Q$
- (B)  $(P \cup Q)'$
- (C)  $P \cap Q$
- (D)  $(P \cap Q)'$

39)



In this Venn diagram, n(A) = n(B). The value of x is \_\_\_\_\_.

- (A) 3
- (B) 4
- (C) 6
- (D) 12
- 40)



In the Venn diagram above, U represents students in a class. T is the set of students who play tennis and F is the set of students who play football.

The number of students who play only one game is \_\_\_\_\_.

- (A) 10
- (B) 15
- (C) 20
- (D) 25

## END OF TEST