Subject: Mathematics

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1) <u>Choose the correct answer</u>:-

a) $(-1)^{104} + (-1)^{103} = $ ....

    a) 0   c) -1

    b) 1   d) 2

b) If Mariam drink 21 glasses of milk weekly, then the rate of what she drinks daily is .... glasses

    a)3   c)7

    b)14   d)20

c) $3 + |-3| = $ ....

    a) 0   c) -6

    b) 3   d) 6

d) The volume of a cuboid whose dimensions are 2 cm, 3cm and 5cm =.........
cm^3

    a) 10   c) 30

    b) 25   d) 50

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2) <u>Complete each of the following</u>:-

a) $N - Z^+ = $ ....

b) The image of the point A(3,-4) by translation (x – 2 , y + 2) is (.........,.....)

c) Sum of measure of two consecutive angles in parallelogram equals.......

d) If $x + 2 = |-4|$ then x = ...

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3) **A)**Which is greater in volume? A cuboid of dimensions 70cm, 50cm and 30 cm or a cuboid whose base area = 2925 cm^2 and its height = 35cm.

B) The following table show the ratio for producing an electronic sets

Represent these data by a pie chart

Set Kind	1^{St}	2nd	3rd	4th
The ratio of production	30%	15%	40%	15%

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4) **Find the S.S. of each of the following**

(a) $x + 7 = 22$, where $x \in \mathbb{N}$

(b) $x - 12 = 6$, where $x \in \mathbb{Z}$

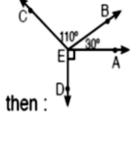5) A box contins 25 coloured balls , 13 red and 12 yellow. If one ball is selected from the box at random.
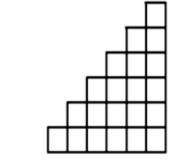
Calculate the probability of :

(a) The event A : the selected ball is red.

(b) The event B : the selected ball is yellow.

(1) Complete

1) If m (∠ B) = 160° , then m (reflex ∠ B) = ············ °

2) If m (∠ A) supplements ∠ B and ∠ A ≡ ∠ B, then m (∠ B) = ············ °

3) In the figure opposite :

   m (∠ CED) = ············

4) In the figure opposite :

   If the square ☐ represents the unit area, then :

   the area of the figure = ············ unit area.
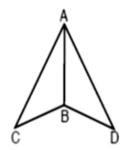
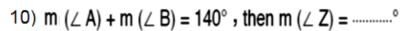5) In the figure opposite :

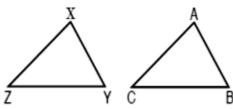   If Δ ABC ≡ Δ ABD let the perimeter of the figure

   ACBD = 20 cm and AB = 6 cm, then perimeter of Δ

   ABC = ············ cm.

6) Two adjacent angles formed by a straight line and a ray with a starting point on this straight line ············

7) The angle whose measure is 46° vertically opposite to an angle whose measure is

   ············

8) If m (∠ A) = 125° , then m (reflex ∠ A) = ············ °

9) In the figure opposite :

   If Δ ABC ≡ Δ XYZ,

10) m (∠ A) + m (∠ B) = 140° , then m (∠ Z) = ············ °

11) The parallelogram whose diagonals are equal in length and perpendicular is……………..

12) ABCD is a parallelogram in which m (∠A) = 50° , then m (∠B) = ……….

13) The measure of each angle of the regular hexagon is ………….

14) The sum of the measure of the exterior angles of any polygon equals……..

15) Each two opposite angles in a parallelogram are………...

16) $-3ab^2 \times 2a^2b^3 = \ldots\ldots$

17) $3 \times 4 - 21 \div 7 = \ldots\ldots$

18) The additive inverse of $(-\frac{2}{3})^3$ is $\ldots\ldots$

19) $\sqrt{100 - 36} = \ldots\ldots$

20) If $x + 9 = 11$, then $7x = \ldots\ldots$

21) If $x = \frac{1}{4}$, $y = \frac{1}{8}$, then $(x - y)^{-1} = \ldots\ldots$

22) $(-\frac{3}{7})^7 \div (\frac{3}{7})^5 = \ldots\ldots$ in its simplest form

23) The additive inverse of $(-\frac{2}{5})^2$ is $\ldots\ldots$

24) The multiplicative inverse of $\sqrt{\frac{10}{2.5}}$ is $\ldots\ldots$

25) The solution set of the equation $-2x + 1 = -3$ in Z is $\ldots\ldots$

26) Complete in the same pattern $1 , 2 , 3 , 5 , 8 \ldots\ldots, \ldots\ldots$

27) $0.00037 = 3.7 \times 10^n$, the value of $n = \ldots\ldots$

28) $\frac{6x}{5} = -2$, then $x^2 = \ldots\ldots$

29) The standard form of the number $0.00003 = \ldots\ldots$

30) The s.s of the equation: $3x + 7 = 5$, $x \in Q$ is $\ldots\ldots$

31) If : $ac > bc$, then $a \ldots\ldots b$ (where $c < 0$)

32) If $a = b$ then $(\frac{3}{7})^{b-a} = \ldots\ldots$

33) If a coin is tossed once then the probability of appearance of a head $= \ldots\ldots$

34) If the probability that the student is absent in a school is 0.15 , if the number of students of this school is 600 , then the number of the present student that day is $\ldots\ldots$

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https://www.youtube.com/watch?v=DGKwdHMiqCg