**Q1) Complete :**

1. |-5| + 7=………………
2. The solution set of equation 3x =-12 in Z+ is ………………
3. The set of odd numbers U the set of even numbers = ……..
4. The measure of angle of the circular sector whose area $\frac{1}{6}$ Of the circle…………...˚
5. If x=4 , y =-5 , then( 2x+3y )=………….
6. The image of the point (5,3) by translation (x+1,y-2) is ……….
7. Z = Z+ U ……….. U …………
8. The additive inverse of |-5| is ……….
9. The complement of N with respect to Z is ……………
10. Z+$ ∩$ Z- =……………….
11. The ratio between the area of one face of a cube and its lateral area =…….**:**……
12. 2 ,6 ,18, ………,……….
13. The measure of the angle for the sector quarter of a circle is ……..
14. ………. Is the smallest positive number
15. A circle its diameter length 8 cm , then ifs area = ………..……cm2 . (Л=3.14 )
16. The lateral area of cuboid which has a squared base of side length 8 cm and its height is 4 cm =…………………….cm2.
17. -| -54 | = ……….
18. 1 ,4, 9 ,16 , 25 ,………..,……………….,……………..
19. If |a| =6 ,then a =………….or…………….
20. The equation 4x2 +3x =8 is in ………………….degree .
21. The equation 3x-4 =17 is in …………………degree .
22. The multiplicative neutral element in Z is ………………..
23. A cube with edge 5 cm , then its total area …………………….cm2
24. x ∈ {-2, -5, -3} $⋂${5, -2, 3}then x= ……………………………
25. Moving to the right is represented by ……………………… numbers , while moving to the left is represented by ……………………… numbers.
26. If the perimeter of one face of cube = 12 cm, then its total area =…..…cm2
27. The image of the point (-5,3) by translation (x,y-3) is ……….
28. -50, -40, -30, …, .…, ….
29. The measure of the angle for the sector represent 20$\%$ of a circle is ……..
30. 2-(-3)=………………..
31. The largest negative integers is ………….
32. The area of the circle whose radius is 21 cm =……………... ( Л=$\frac{22}{7}$ )
33. Z+ - Z- =………………………..
34. A cube of edge 3cm , its L.S. A. = …………………cm2

**Q2) CHOOSE THE CORRECT ANSWER :**

1. If A $⊂$ $\left\{2,-5,-3\right\}$ $∩\left\{-5,-2, 3\right\}$ Then A=………….. $ \left(a\right)\left\{2\right\} \left(b\right) \left\{-3\right\} \left(c\right) \left\{-5\right\} (d) \left\{5\right\}$
2. The measure of angle of the circular sector whose area represent from the area of the circle = -------

 (a) 30˚ (b) 45˚ (c) 60˚ (d) 90˚

1. If the perimeter of one face of a cube =8cmthen its total area= ----cm2

 (a) 30 (b) 24 (c) 54 (d) 60

 4) If the lateral area of a cuboid =120 cm2 and the dimensions for the

 base are 4cm , 6cm . then its height = -----------cm

 (a) 5 (b) 6 (c) 12 (d) 2.5

 5) The image of the point A(-4,3) by translation (-1,-4) is ------

 (a) (-5,-7) (b) (-5,-1) (c) (-7,3) (d) (-3,-1)

6) The lateral area of the cuboid with length =3cm , width = 2cm and height = 4cm equals -----------cm2 (a) 20 (b) 24 (c) 40 (d) 52

(7)$\left\{0,10\right\}$……………………Z+ (a)$\in $ (b) $\notin $ (c) $⊂$ (d) $⊏$

(8) The T.S.A. of cube is 216 cm2 , then area of one face =……………... cm2

 (a) 63 (b)36 (c) 45 (d)54

(9) the S.S. of the equation 3x +1 =7 in Z is ………………………. . $ \left(a\right)\left\{-1\right\} \left(b\right) \left\{-2\right\} \left(c\right) ϕ (d) \left\{2\right\}$

**Q3)Arrange the following integers :**

(a) 6 , -60 , 2 , -17 , -22 , 0 (ascendingly).

 …… , ……. , …… , ……. , …… , …….

(b) 1 , -11 , 3 , -1 , -8 , 5 (descendingly).

 …….… , …….…. , ……….. , ….…. , …..…… , …..…….

**Q4)Complete the space using the correct sign (>, < or =) :**

(a) 3 …. -6 (b) -7 … 17 (c) | -13| …. 3

(d) |-5 | ….. 5 (e) 3 + |-3 |…. 8 (f) - |-4 |….. 2

**Q5)** One winter night, the TV announcer for the weather forecast referred to the temperature in Cairo 18°C and in Moscow -4°C. Calculate the **difference** in temperature between Cairo and Moscow

**Q6**) Niveen used a piece of a squared card board shaped of side length 80cm and she used cut and paste paper tools to design a cuboid its length 40cm, its width 20cm, its height 30cm. Show whether the piece of the card board is enough to design the cuboid or not?

 **Q7**) (a) Find the area and the circumference for the circle with diameter 14cm .

 (b) Find the length of the radius of the circle whose circumference

 equal 88cm then find its area? ( Л=$\frac{22}{7}$ )

**Q8)** The sum of the edge length of a cube equals 108 cm ,find its lateral

 area ,its total area , then find the ratio between them

**Q9)** The image of (a,b) by translation (2,-3) is (5,-4) ,Find (a,b)

**Q10)** A cuboid whose total area = 132cm2 and its lateral area = 112cm2

 Find the area of its base?

**Q11)** Find the Solution set for the following equations in N and Z

 (a) 3X + 2 = 17 (b) 2X - 5 = -21

**Q12)** (1) Find the value of K in the following :

 (a) |-5|= K (b) K∊{2,-5,-3} ∩{-2,5,-3}

(2) Use the properties of addition and multiplication in Z to put the following

 in the simplest form:

 (a) ( 8 + (-5) ) ×6 (b) -15 + 29 + 15

 (3) If X=2 and Y = -5 find the numerical value of (3X + 2Y)

**Q13)** A Rome with length= 5 m ,width= 4m and height =3m ,We need to

pant its walls and its ceiling by a pant cost 15 pound for each square meter

. Find the cost for panting

**Q14)** Draw △ ABC ,where A(1,1) , B(-3 , -1) , C (0 , -5) then determine

 graphically its image by translation (5,0) .

**Q15**) Determine in the coordinate plane the following points: A= (-3, 4),

 B =(1, 4), C =(1 , 2), then find :

 1- AB = ………….. , BC = …………….

 2- The image of ∆ ABC by the translation (0, -3).



**Q16)**

**Q17)** The following table show the ratio for producing chickens in four farms in a

 month

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Farm | 1st | 2nd | 3rd | 4th | Total |
| **The ratio of production** | **10٪** | **35٪** | **30٪** | **………….** | **100٪** |
| **m ( of central angle)** | **…….˚** | **…………….˚** | **………….˚** | **…………˚** | **360˚** |

 (1) Complete the table (2) Represent these data by a pie chart.

**=============================================================**

**Q18)** The following table show the number of study hours that Mahmoud

 done in a week

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Subject** | **Arabic** | **Math** | **Science** | **English** | **Total** |
| **The number of hours** | **8** | **12** | **6** | **10** |  |
| **m ( of central angle)** | **……….˚** | **…………….˚** | **………….˚** | **…………˚** | **360˚** |

Represent these data by a pie chart

**=============================================================**

**Q19)** The following table show the ratio for producing an electronic sets

 Represent these data by a pie chart

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Set kind | 1st | 2nd | 3rd | 4th | Total |
| **The ratio of production** | **30٪** | **15٪** | **40٪** | **15٪** | **100٪** |
| **m ( of central angle)** | **……….˚** | **…………….˚** | **………….˚** | **…………˚** | **360˚** |

**With my best wishes**