APS KALUCHAK
2016-17
MATHEMATICS
HOLIDAYS HOMEWORK FOR CLASS VIII

1. Find the square root of the following by prime factorisation method.
   a) 11025 b)29575 c)27225 d)15376
2. Find the smallest number by which the numbers given below must be multiplied to get a perfect square.
   a) 7350 b) 6498 c) 30420 d) 52020
3. Find the smallest number by which the numbers given below must be divided to get a perfect square.
   a) 6075 b) 6050 c) 25350 d) 28880.
4. Find the smallest square number which is exactly divisible by 18, 24, 32, 36.
5. Find the square root of the following by division method
   a) 269361 b) 683929 c) 100489.
6. Find the least number which must be subtracted from the following numbers so as to get perfect squares. Find the square root of the perfect squares so obtained.
   a) 4235 b) 5488 c) 7411
7. Find the smallest number of 4 digits which is a perfect square.
8. Find the greatest number of 5 digits which is a perfect square.
9. Find the square root of the 7 correct up to 7 decimal places.
10. The area of a square field is 105625 sq metres. A man cycles along the boundary at 10km/hr. In how much time will he return at the starting point?
11. The sum of two rational numbers is -4/5. If one of the them is 5/6. Find the other number.
12. Divide the difference of 18/6 and 6/12 by their sum.
13. Insert five rational numbers between -1/2 and 5/4.
14. Find the difference between the greatest and the least of -5/6, 2/9 and -4/9.
15. The sides of a triangular field are 29/2m, 57/3m, and 77/9m. Find its perimeter.
16. The length of 21 skipping ropes is 147/4m. Find the length of 35 rope.
17. By what rational number should we divide -125/36 to get 36/25.
18. Find 10 rational numbers between 0 and 1.
19. Find the value of "x" , if $(7/8)^{-3} \times (7/8)^{5} = (7/8)^{x}$
20. Find the value of "x" ,if $(2/3)^{-2} \times (2/3)^{-9} = (2/3)^{2x+1}$
21. By what number should $(2/3)^{-3}$ must be multiplied so that the product is 12.
22. By what number should $(3/4)^{-3}$ be divided so that the quotient becomes 128.
23. Express the following number in standard form :
   a) 0.0000045 b) 0.00000234587 c) 6024500000 d) 2135486.2
24. Draw a working model of the algebraic identity : $(a + b)^2 = (a)^2 + (b)^2 + 2ab$
25. Draw a working model to show the angle sum property of a triangle.