HOLIDAY PROJECT WORK

CLASS VIII

Inspiration from education!

Express yourself!

Explore knowledge!

Innovation is the new enterprise

Innovation is a key element in doing the summer assignment, having fun as you learn is our aim and goal!

Follow the instructions and step by step guide as you will find out that the English homework helps you to be expressive, enterprising and innovative!

1. Make a file/folder of about 6-8, A-4 size sheets.
2. Use to pages to make a list of famous quotes from Shakespearean plays (this list will be very useful in writing debates, essays or speeches) Collect pictures and names related to the quotes
3. Use two pages to make an interesting display on the following topic 'Innovate for digital India challenge'

Collect information/data/pictures/newspaper cuttings and put it together as an informative collage.

MATHS

Solve this exercise in <u>PNB with process and steps.</u>

Mental maths - Solve all the Worksheets in book of   Ch- Rational Numbers

                                                                            Ch- Square and square roots

1. Represent the following rational numbers on the number line:

    a) −3/4   b) 31/−6   c) −1/2   d) ¾

2. Write the following rational numbers in the standard form:

    a) 5/15   b) −24/40   c) 33/−77   d) −45/−105

3. Compare the following rational numbers:

    a) −9/27, 6/−18   b) −5/7, 10/−6   c) 3/−8, −15/40   d) −11/7, 33/21

4. Arrange the following rational numbers in the descending order:

    a) 2/−3, −4/9, −5/12, 7/−18   b) 3/−4, −5/12, −7/16, 9/−24

5. Arrange the following rational numbers in the ascending order:

    a) 2/5, 1/3, 3/4, 1/6   b) 5/6, 7/8, 11/12, 3/10

6. Fill in the blanks by the correct symbol >, = or < :

    a) | 3/4| ---------| ½| b) |−1/2| ----- | −3/4 |

7. Add: a)   3/7 and -9/7,   b)   5/9 and 7/−9   c)   2/5, 5/−9 and −6/15

8. Simplify: a) −2 + (3 / 8) + (−1 / 5)   b)   (2/3) + (−7/11) + (−1/4)

9. Verify that   a + b = b + a   by taking   (a) a = −7/5, b = 2/7   (b) a = −1 , b = −2/3

10. Verify that   (a+b)+c=a+(b+c) by taking

    (a) a =−2 , b = −2/3 ,   c = −3/4   (b) a = −12, b = −9/11, c = 7/−12

11. Simplify the following:

    a) (2/3) + (-4/5) + I + (-2/3) + (−11/5)   b) (5/8) + (−8/9) + 0 + (−13/3) + (17/24)

12. Subtract :   1)   (−3/4) from (1/2)   2)   (5/8) from (−3/14)

13. What should be added to (−7/20) to get (−2/5)?

14. The sum of two rational numbers is (−3/7). If one of the number is (−5/8) find the other.

15. The sum of two rational numbers is (−5/8). If one of the number is (−6/11), find the other number.

16. To which number should (2/3) be added to give (−11/4)?

17. From which number should (−11/4) be subtracted to give (−11/4)?

18. Find the product of :

    1) 5/9, −2/5   2) −5, −3/15

19. Multiply, and give the product in the standard form:

    1) −6/25 by 50/24   2) 3/11 by 22   3) 21/5 by −15/21   4) −36 by −5/9

20. Verify the property a x b = b x a by taking :

    1) a = (−12/7), b = (−21/5)   2) a = 0 , b = (−13/3)

21. Verify the property a x (b x c) = (a x b) x c by taking

    1) a = (7/5), b = (−9/4), c = (1/2)   2) a = 1, b = (−13/5), c = (3/5)

22. Verify the property a✕ (b+c)=(a✕b)+(a✕c) by taking:

    1) a = (1/3), b = 0, c = (−7/6)   2) a = −2, b = (9/5), c = (−2/15)

23. Verify that | x + y | ≤ | x| + | y | by taking x= 13/4 and y= 3/2

24. Verify that | x + y | = | x| + | y | by taking x = 1/2 and y = -1/4

25. The product of two rational numbers is 6. If one of them is 8, find the other number.

26. By what number should (-6/11) be multiplied to get (−32/11)?

27. Find the rational number between:

    1) 3 and 4   2) −7 and −6

28. Find three rational numbers between:

    1) −5 and 8   2) (−1/3) and (1/2)

29. What least number must be added to 6072 to make it a perfect square?

    (a) 6   (b) 10   (c) 12   (d) 16

30. Which of the following numbers is a perfect square?

    (a) 141   (b) 196   (c) 124   (d) 222

31. Which of the following is a Pythagorean triplet?

    (a) (2, 3, 5)   (b) (5, 7, 9)   (c) (6, 9, 11)   (d) ((8, 15, 17)

32. Find the least number which must be subtracted from 8105 to make it a perfect square.

33. Find the least number which must be subtracted from 7060 to obtain a perfect square.

34. Find the least number which must be added to 306455 to obtain a perfect square.

35. Find the least number which must be added to 8400 to obtain a perfect square. Find this perfect square and its square root.

36. Find the least number of four digits (4 digits) which is a perfect square. Also find the square root of the number so obtained.

37. Find the greatest number of five digits (5 digits) which is a perfect square. Also find the square root of the number so obtained.

38. Find the square root of each of the following numbers by using the method of prime factorization:

    1. 225   2. 441   3. 729   4. 1296   5. 2025   6. 4096   7. 7056

    8. 8100   9. 9216   10. 11025   11. 15876   12. 17424

39. Find the smallest number by which 1008 must be multiplied to get a perfect square. Also, find the square root of the perfect square so obtained.

40. 1225 plants are to be planted in a garden in such a way that each row contains as many plants as the number of rows. Find the number of rows and the number of plants in each row.

41. The students of a class arranged a picnic. Each student contributed as many rupees as the number of students in the class. If the total contribution is Rs 1156, find the strength of the class.

42. Find the smallest number by which 768 must be multiplied to get the perfect square number.

Waste Management- An urgent environmental concern

As the population keeps increasing, more people move to cities. Increased urbanisation generates more wastes per square kilometre. The disposal of waste is becoming a major global problem. These wastes are indiscriminately disposed and as a consequence, the land area used for the waste disposal is increasing along with major air and water pollution.

Prepare a project on the above topic with the help of guidelines provided below:

- Introduction – Need for waste management
- Classification of waste generated (e.g. domestic waste, food waste, medical waste, radioactive waste etc.).Mention some related statistics in India.
- Find out how advanced countries like USA, Singapore etc. manage their waste.
- What are the steps taken by the waste management companies?
- Suggest some innovative ways (should be original) to manage waste that can be adopted by our government and society to control as well as manage the waste.
- Prepare 2 slogans to be used as advertisement for a campaign.
- Paste pictures to illustrate your research on this topic.

-इसके लिए ध्यान देने योग्य बातें

१.A३ साइज़ की दो शीट्स लें, फ़ोल्ड कारें.

२अब इस पर पाषाण युग से . लेकर अबतक जो बदलाव आएँ हैं चित्रों सहित बताएँ, दिखाएँ।

३एसमाचारपत्र का नाम रखि . बच्चों की दुनिया' ....

४समाचारपत्र रंगीन हो ., साइड में दोनो तरफ़ मार्जन छोड़ें।

५संपादक के स्थान पर अपना . नाम लिखें।

६पेपर तैयार होते ही उसे . फ़ोल्ड करें और अब रबर बैंड से बाँधें, और छुट्टियों उपरांत सब्मिट करें!