JASWANT MODERN SR.SEC.SCHOOL SUMMER HOLIDAY WORKSHEET 2025-26 MATHS CLASS 8(SetA)

1. Find the additive inverse of: a) $-\frac{15}{8}$ b) $-\frac{9}{11}$ c) $\frac{-6}{-7}$ d) -18 e) 0 f) $\frac{23}{9}$
2. A square park has an area of 1521 m². Find the length of one side. If perimeter is 1784 m, then what will be the length of its sides.
3. Express the following numbers in standard form: a) 6872 b) 140000 c) 15360000000 d) 17834
4. a) The area of a square field is 4900 m². Find its perimeter. b) If area is 360000 m^2, then find its perimeter.
5. a) What number should be added to $\frac{-7}{8}$ to get $\frac{4}{9}$ b) What should be subtracted from $\frac{-2}{3}$ to get $\frac{-1}{6}$
6. Subtract: a) $\frac{3}{4}$ from $\frac{2}{3}$ b) $\frac{-5}{7}$ from $\frac{-2}{5}$ c) $\frac{-8}{9}$ from $\frac{-3}{5}$ d) $\frac{-9}{7}$ from -1 e) $\frac{-32}{13}$ from $\frac{-6}{5}$
7. A school wants to build a square garden of area 2500 m². How much fencing material is required to enclose the garden? And find the cost of fencing at the rate of Rs.50 per metre.
8. Evaluate: a) $\frac{3}{5}+\frac{7}{3}+\frac{-11}{5}+\frac{-2}{3}$ b) $\frac{-8}{3}+\frac{-1}{4}+\frac{-11}{6}+\frac{3}{8}$ c) $\frac{-13}{20}+\frac{11}{14}+\frac{-5}{7}+\frac{7}{10}$ d) $\frac{-6}{7}+\frac{-5}{6}+\frac{-4}{9}+\frac{-15}{7}$
9. Write the following numbers in usual form: a) 2.06 x 10^{-5} b) 5.673 x 10^{-4} c) 6.82 x 10^{-6}
10. Evaluate: a) $\sqrt{92416}$ b) $\sqrt{10404}$ c) $\sqrt{17956}$ d) $\sqrt{14161}$ e) $\sqrt{16384}$
11. A square courtyard has an area equal to that of a rectangular courtyard which is 50 m long and 32 m wide. Find the length of one side of the square courtyard. Find the cost of putting grass in it at rate of Rs. 100/m^2
12. Verify: a) $\left(\frac{-7}{11}+\frac{2}{-5}\right)+\frac{-13}{22}=\frac{-7}{11}+\left(\frac{2}{-5}+\frac{-13}{22}\right)$ b) $-1+\left(\frac{-2}{3}+\frac{-3}{4}\right)=\left(-1+\frac{-2}{3}\right)+\frac{-3}{4}$
13. Arrange the following rational numbers in ascending order: a) $\frac{4}{-9},\frac{-5}{12},\frac{7}{-18},\frac{-2}{3}$ b) $\frac{-3}{4},\frac{5}{-12},\frac{-7}{16},\frac{-9}{24}$
14. A square carpet covers an area of 1156 m². Find the cost of carpeting it at Rs.80 per m².
15. Find a rational number between: a) $\frac{3}{7}$ and $\frac{5}{4}$ b) $\frac{2}{9}$ and $\frac{3}{8}$ c) $\frac{7}{6}$ and $\frac{9}{5}$
16. The product of two number is $-\frac{28}{27}$. if one of the number is $-\frac{4}{9}$, find the other number.
17. If the square of a number is 5929, find the number. And if square is 7744, find the number.
18. Find the product of: a) $-\frac{3}{7}$ x $\frac{14}{5}$ b) $\frac{13}{6}$ x $\frac{-18}{91}$ c) $-\frac{11}{9}$ x $\frac{-51}{44}$ d) $\frac{-3}{-8}$ x $\frac{-2}{-5}$
19. Evaluate: a) $\sqrt{9.8596}$ b) $\sqrt{156.25}$ c) $\sqrt{0.2916}$ d) $\sqrt{1.0816}$ e) $\sqrt{6.4009}$
20. A group of students is arranged in rows such that the number of rows is equal to the number of students in each row. If the total number of students is 625, find the number of rows.
21. In a stack there are 4 books each of thickness 24 mm and 6 paper sheets each of thickness 0.015 mm. What is the total thickness of the stack in standard form? Also find the volume of papers?
22. Find the value of x for which: $a)\ (\frac{4}{9})^4 \text{ x } (\frac{4}{9})^{-7}=(\frac{4}{9})^{2x-1}$ $b)\ (\frac{5}{3})^{-4} \text{ x } (\frac{5}{3})^{-5}=(\frac{5}{3})^{3x}$
23. A school wants to build a square garden of area 2500 m². How much fencing material is required to enclose the garden? Also find the cost of fencing at rate of Rs.215/m^2.
24. By what number should $(\frac{-2}{3})^{-3}$ be divided so that quotient may be $(\frac{4}{27})^{-2}$?
25. A square tile has an area of 324 cm². How many such tiles will be needed to cover a rectangular floor of size 540 cm × 432 cm? Also find the cost of tiles at the rate of Rs.150 per sqm.
26. Find the value of *x* if: a) $5^{2x+1} \div 25 = 125$ b) $7^{3x+1} \div 343 = 49$
27. A square-shaped pond has an area of 1225 m². What is the cost of fencing it at Rs.25 per metre?
28. Determine the smallest positive integer that must be multiplied with 1620 in order to obtain a perfect square. Once the required number is found and the multiplication is performed, also calculate the square root.
29. Identify the least number that should be added to 1300 so that the sum becomes a perfect square. After determining the required number to be added, compute the square root of the resulting perfect square.
30. Find the smallest possible number that must be subtracted from 7581 in order to yield a perfect square. After performing the subtraction, also find the square root of the number that results from this operation.
31. Find the smallest number by which 2925 must be divided to obtain a perfect square. Also find its square root.
32. The area of square field is 60025 m^2. A man cycles along its boundary at 18 km/h. In how much time will he return to the starting point? How much he will take for 3 rounds?
33. Find the least square number which is exactly divisible by each of the number 8, 12, 15 and 20.

JASWANT MODERN SR.SEC.SCHOOL SUMMER HOLIDAY WORKSHEET 2025-26 MATHS CLASS 8 (SETB)

1. Express the following numbers in standard form: a) 2842 b) 187600 c) 12350110 d) 184234
2. a) The area of a square field is 22500 m². Find its perimeter b) If area is 12544 m^2, then find its perimeter.
3. a) What number should be added to $\frac{-7}{8}$ to get $\frac{4}{9}$ b) What should be subtracted from $\frac{-2}{3}$ to get $\frac{-1}{6}$
4. Subtract: a) $\frac{7}{4}$ from $\frac{2}{8}$ b) $\frac{-5}{9}$ from $\frac{-1}{5}$ c) $\frac{-4}{9}$ from $\frac{-3}{4}$ d) $\frac{-2}{7}$ from -3 e) $\frac{-12}{13}$ from $\frac{-6}{15}$
5. A school wants to build a square garden of area 6400 m². How much fencing material is required to enclose the garden? And find the cost of fencing at the rate of Rs.57 per metre.
6. Find the additive inverse of: a) $-\frac{27}{18}$ b) $-\frac{26}{38}$ c) $\frac{-3}{-7}$ d) -14 e) 1 f) $\frac{23}{18}$
7. A square park has an area of 1521 m². Find the length of one side. If perimeter is 1784 m, then what will be the length of its sides.
8. Evaluate: a) $\frac{4}{9}+\frac{5}{6}+\frac{-7}{12}+\frac{2}{3}$ b) $\frac{-3}{8}+\frac{1}{2}+\frac{-5}{16}+\frac{7}{4}$ c) $\frac{9}{11}+\frac{2}{11}+\frac{5}{22}+\frac{-1}{2}$ d) $\frac{7}{15}+\frac{-4}{9}+\frac{2}{5}+\frac{-1}{3}$
9. Write the following numbers in usual form: a) 1.16×10^{-5} b) 9.273×10^{-4} c) 2.72×10^{-6}
10. Arrange the following rational numbers in ascending order: a) $\frac{43}{-9}, \frac{-3}{11}, \frac{1}{-16}, \frac{-2}{3}$ b) $\frac{-7}{5}, \frac{-5}{-12}, \frac{5}{18}, \frac{-9}{24}$
11. A square carpet covers an area of 1156 m². Find the cost of carpeting it at Rs.80 per m².
12. Evaluate: a) $\sqrt{12769}$ b) $\sqrt{60025}$ c) $\sqrt{17689}$ d) $\sqrt{35721}$ e) $\sqrt{24964}$
13. A square courtyard has an area equal to that of a rectangular courtyard which is 52 m long and 28 m wide. Find the length of one side of the square courtyard. Find the cost of putting grass in it at rate of Rs. 102/m^2
14. Find a rational number between: a) $\frac{2}{5}$ and $\frac{7}{4}$ b) $\frac{2}{11}$ and $\frac{5}{9}$ c) $\frac{2}{13}$ and $\frac{1}{7}$
15. The product of two number is $-\frac{28}{27}$. if one of the number is $-\frac{4}{9}$, find the other number.
16. Evaluate: a) $\sqrt{773.84}$ b) $\sqrt{3993.44}$ c) $\sqrt{12676.76}$ d) $\sqrt{210.25}$ e) $\sqrt{7814.56}$
17. A sports coach arranges players in a square formation where the number of rows equals the number of players in each row. If there are 1,296 players, how many rows are there?
18. In a stack there are 4 books each of thickness 34 mm and 8 paper sheets each of thickness 0.075 mm. What is the total thickness of the stack in standard form?
19. If the square of a number is 5929, find the number. And if square is 7744, find the number.
20. Find the product of: a) $-\frac{5}{2} \times \frac{19}{4}$ b) $\frac{12}{4} \times \frac{-14}{42}$ c) $-\frac{8}{7} \times \frac{-21}{24}$ d) $\frac{-1}{-8} \times \frac{-4}{-6}$
21. Find the value of x for which: $a) \left(\frac{2}{3}\right)^8 \times \left(\frac{2}{3}\right)^{-4} = \left(\frac{2}{3}\right)^{4x-1}$ $b) \left(\frac{7}{4}\right)^{-5} \times \left(\frac{7}{4}\right)^{-2} = \left(\frac{7}{4}\right)^{7x}$
22. A school wants to build a square garden of area 2401 m². How much fencing material is required to enclose the garden? Also find the cost of fencing at rate of Rs.113/m^2.
23. By what number should $\left(\frac{-5}{4}\right)^{-2}$ be divided so that quotient may be $\left(\frac{25}{64}\right)^3$?
24. Determine the smallest positive integer that must be multiplied with 1620 in order to obtain a perfect square. Once the required number is found and the multiplication is performed, also calculate the square root.
25. Identify the least number that should be added to 5600 so that the sum becomes a perfect square. After determining the required number to be added, compute the square root of the resulting perfect square.
26. A class has 40 students. $\frac{3}{10}$ of them like cricket, $\frac{2}{5}$ like football, and the rest like basketball. How many students like basketball?Find the value of *x* if: a) $9^{2x+1} \div 81 = 729$ b) $12^{3x+1} \div 144 = 12$
27. A square-shaped pond has an area of 1764 m². What is the cost of fencing it at Rs.32 per metre?
28. Find the smallest possible number that must be subtracted from 9876 in order to yield a perfect square. After performing the subtraction, also find the square root of the number that results from this operation.
29. Find the smallest number by which 2925 must be divided to obtain a perfect square. Also find its square root.
30. The area of square field is 60025 m^2. A man cycles along its boundary at 18 km/h. In how much time will he return to the starting point? How much he will take for 5 rounds?
31. A machine produces $\frac{3}{8}$ of a batch of products in 2 hours. At the same rate, how long will it take to complete $1\frac{3}{4}$ batches?.