EduSahara™ Worksheet

Name : Chapter Based Worksheet

Chapter : Real Numbers

Grade : SSC Grade IX

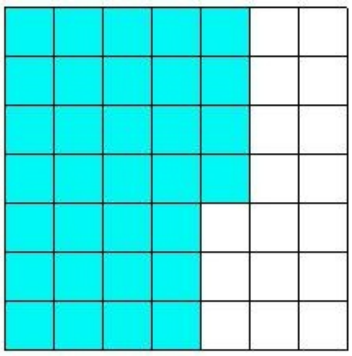
1. Express $\frac{5}{3}$ as a decimal correct to 2 decimal places

   (i) 1.57 (ii) 1.77 (iii) 1.67 (iv) 1.47 (v) 1.87

2. Express $\frac{17}{19}$ as a decimal correct to 2 decimal places

   (i) 0.09 (ii) 8.95 (iii) 0.69 (iv) 0.99 (v) 0.89

3. What fraction of the figure is shaded?



   (i) $\frac{32}{49}$ (ii) $\frac{34}{49}$ (iii) $\frac{32}{47}$ (iv) $\frac{32}{51}$ (v) $\frac{30}{49}$

4. Express $\frac{97}{30}$ as a decimal correct to 1 decimal places

   (i) 3.1 (ii) 3.3 (iii) 3.2 (iv) 3.4 (v) 3

5. The rationalising factor of $6\sqrt{56}$ =

   (i) 14 (ii) $\sqrt[4]{14}$ (iii) $\sqrt{16}$ (iv) $\sqrt{12}$ (v) $\sqrt{14}$

6. Simplify the expression $\left(\frac{-9}{8}\right)^{(-7/2)} \times \left(\frac{-9}{8}\right)^{(-7/9)} \times \left(\frac{-9}{8}\right)^{(-9/2)}$

   (i) $\left(\frac{-11}{8}\right)^{(-79/9)}$ (ii) $\left(\frac{-9}{8}\right)^{(-95/11)}$ (iii) $\left(\frac{-9}{8}\right)^{(-79/9)}$ (iv) $\left(\frac{-7}{8}\right)^{(-79/9)}$ (v) $\left(\frac{-9}{8}\right)^{-9}$

7. The decimal number -1.452 lies between

   (i) {-2,-1} (ii) {-3,-2} (iii) {-4,-3} (iv) {-1,0} (v) {0,1}

8. If $\sqrt{2} = 1.4142, \sqrt{3} = 1.7321, \sqrt{5} = 2.2361, \sqrt{7} = 2.6458,$

the value of $(\sqrt{2} + 9\sqrt{9}) =$

(i) 30.414 (ii) 28.414 (iii) 26.414 (iv) 27.414 (v) 29.414

9. $6\sqrt{8} - 5\sqrt{8} =$

(i) $2\sqrt{2}$ (ii) $2\sqrt[4]{2}$ (iii) $2\sqrt{5}$ (iv) $2\sqrt{-1}$ (v) 4

10. 19.91 =

(i) $\frac{1991}{100}$ (ii) $\frac{1991}{10}$ (iii) $\frac{1991}{1000}$ (iv) 1991 (v) $\frac{1991}{10000}$

11. 10.11 =

(i) $\frac{1011}{1000}$ (ii) 1011 (iii) $\frac{1011}{100}$ (iv) $\frac{1011}{10}$ (v) $\frac{1011}{10000}$

If $\sqrt{2} = 1.4142, \sqrt{3} = 1.7321, \sqrt{5} = 2.2361, \sqrt{7} = 2.6458,$

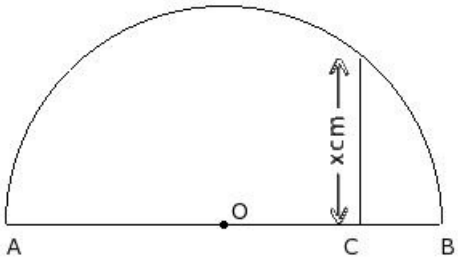
12. the value of $\frac{8\sqrt{9}}{(-4\sqrt{7})} =$

(i) 5.732 (ii) 8.732 (iii) 4.732 (iv) -2.268

13. Simplify $\frac{(-2)^3 \times (-4)^3 \times (-3)^3}{(-2)^2 \times (-2)^3 \times (-4)^2 \times 3^3}$

(i) 4 (ii) 2 (iii) 0 (iv) -1 (v) 1

14. If the length of AB = 5.4 cm and CB = 1 cm, find the value of x

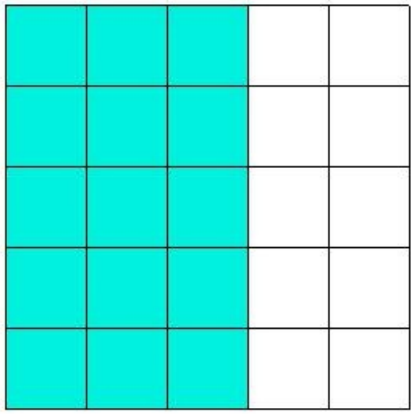


(i) $\sqrt{4.8}$ cm (ii) $\sqrt{4.4}$ cm (iii) $\sqrt{4.7}$ cm (iv) $\sqrt{4.3}$ cm (v) $\sqrt{4.0}$ cm

15. Find the period of the recurring decimal $5.\overline{1}$

(i) 1 (ii) 10 (iii) 2 (iv) 0

16. What fraction of the figure is shaded?



(i) $\frac{17}{25}$ (ii) $\frac{13}{25}$ (iii) $\frac{15}{23}$ (iv) $\frac{5}{9}$ (v) $\frac{3}{5}$

17. If $\sqrt{2} = 1.4142, \sqrt{3} = 1.7321, \sqrt{5} = 2.2361, \sqrt{7} = 2.6458,$

the value of $(-6\sqrt{6}) =$

(i) -7.697 (ii) -6.697 (iii) -3.697 (iv) -14.697

18. Simplify $\frac{(-5)^2 \times (-3)^{-2}}{(-2)^{-2} \times 3^{-2}}$

(i) 10^2 (ii) 13^2 (iii) 10^3 (iv) 10 (v) 7^2

19. The decimal number 4.0019 lies between

(i) {4.0029,4.0039} (ii) {4.0017,4.0018} (iii) {3.9999,4.0009} (iv) {4.0009,4.0029}

(v) {4.0020,4.0021}

20. The solution of $\sqrt{10}$ lies between

(i) 3.16 and 3.17 (ii) 3.15 and 3.16 (iii) 3.17 and 3.18 (iv) 3.14 and 3.15 (v) 3.18 and 3.19

21. $\left(\frac{1}{8}\right)_{20} =$

(i) $\sqrt[6]{20}$ (ii) $\sqrt[8]{20}$ (iii) $\sqrt[8]{18}$ (iv) $\sqrt[8]{23}$ (v) $\sqrt[1]{8^{20}}$

22. $(-2\sqrt{9}+5\sqrt{3}+3\sqrt{8})+(-7\sqrt{9}+2\sqrt{8}-9\sqrt{6}) =$

(i) $(-27+5\sqrt[4]{3}+10\sqrt{2}-9\sqrt{6})$ (ii) $(-27+5\sqrt{3}+10\sqrt{2}-9\sqrt{6})$ (iii) $(-27+5\sqrt{3}+10\sqrt[4]{2}-9\sqrt{6})$

(iv) $(-29+5\sqrt{3}+10\sqrt{2}-9\sqrt{6})$ (v) $(-27+5\sqrt{3}+10\sqrt{2}-9\sqrt{8})$

23. The conjugate of $(18\sqrt{5}+2\sqrt{7})$ =

(i) $(18\sqrt{2}-2\sqrt{7})$ (ii) $(18\sqrt{5}-2\sqrt[4]{7})$ (iii) $(18\sqrt{7}-2\sqrt{7})$ (iv) $(18\sqrt{5}-14)$ (v) $(18\sqrt{5}-2\sqrt{7})$

24. Which of the following decimal numbers lie between 5915 and 5916?

(i) 591.6 (ii) 5915.9 (iii) 59158.9 (iv) 5916.3 (v) 5914.1

25. Simplify the expression $\left(\frac{8}{5}\right)^{-9} \times \left(\frac{8}{5}\right)^{-9} \times \left(\frac{8}{5}\right)^{-5}$

(i) $\left(\frac{8}{5}\right)^{-22}$ (ii) $\left(\frac{8}{5}\right)^{-23}$ (iii) $\left(\frac{8}{5}\right)^{-24}$ (iv) 2^{-23} (v) $\left(\frac{6}{5}\right)^{-23}$

Assignment Key

1) (iii)	2) (v)	3) (i)	4) (iii)	5) (v)	6) (iii)
7) (i)	8) (ii)	9) (i)	10) (i)	11) (iii)	12) (iv)
13) (v)	14) (ii)	15) (i)	16) (v)	17) (iv)	18) (i)
19) (iv)	20) (i)	21) (ii)	22) (ii)	23) (v)	24) (ii)
25) (ii)					