



A Premier Institute for Pre-Medical & Pre Engineering

**SRI VIDYA
ARADHANA
ACADEMY**

“Transforming Your DREAMS Into Reality...!”

**NEET/JEE**
Topic: Understanding Fractions and Decimals

Sub: Mathematics

Assignment: 01

Prof. Chetan Sir

*Designed for JEE/NEET Aspirants to Strengthen Calculation Skills***Que.1: Sum, Difference, Product, Quotient of Fractions**

1. $\frac{2}{3} + \frac{1}{4}$

4. $\frac{4}{9} \div \frac{2}{3}$

7. $\frac{1}{2} \times \frac{3}{4}$

10. $\frac{13}{16} - \frac{5}{8}$

13. $\frac{8}{9} + \frac{5}{6}$

16. $\frac{3}{4} \div \frac{9}{16}$

19. $\frac{2}{5} + \frac{3}{10}$

22. $\frac{5}{6} \div \frac{5}{12}$

25. $\frac{6}{11} \times \frac{11}{12}$

28. $\frac{7}{9} - \frac{2}{9}$

31. $\frac{1}{2} + \frac{1}{3} + \frac{1}{6}$

34. $\frac{4}{5} \div \frac{2}{3} \times \frac{3}{5}$

37. $\frac{2}{3} \div \frac{4}{9} + \frac{1}{3}$

40. $\frac{9}{10} \div \frac{3}{5} - \frac{1}{2}$

43. $\frac{1}{3}$

46. $\frac{5}{2}$

49. $\frac{5}{8} - \frac{1}{4} + \frac{3}{16}$

52. $-\frac{3}{4} + \frac{2}{5}$

55. $\frac{5-3}{2}$

58. $\frac{-1 \times \frac{4}{3}}{-2 - \frac{3}{4}}$

61. $\frac{2}{3} \times \left(-\frac{3}{5}\right) \times \frac{5}{6}$

64. $\frac{4 + \left(-\frac{3}{2}\right)}{-\frac{1}{2} \times 2}$

67. $\frac{\frac{2}{3} \times \frac{3}{4} \times (-1)}{4 - \frac{2}{5}}$

70. $\frac{-2}{5} \times \frac{5}{6} \div \frac{-1}{3}$

73. $\frac{5}{6} - \frac{2}{3} + \left(-\frac{1}{2}\right)$

2. $\frac{5}{6} - \frac{1}{3}$

5. $\frac{7}{8} + \frac{5}{12}$

8. $\frac{5}{6} \div \frac{10}{3}$

11. $\frac{4}{7} \times \frac{14}{5}$

14. $\frac{11}{12} - \frac{7}{18}$

17. $\frac{15}{16} + \frac{7}{8}$

20. $\frac{7}{12} - \frac{1}{4}$

23. $\frac{1}{3} + \frac{2}{5}$

26. $\frac{8}{15} \div \frac{4}{5}$

29. $\frac{2}{3} \times \frac{9}{10}$

32. $\frac{3}{4} - \frac{1}{2} + \frac{1}{4}$

35. $\frac{7}{8} + \frac{1}{4} - \frac{1}{2}$

38. $\frac{5}{12} \times \frac{6}{25} - \frac{1}{5}$

41. $\frac{\frac{1}{2}}{\frac{3}{4}}$

44. $\frac{\frac{3}{4}}{\frac{5}{6}}$

47. $\frac{1}{4} + \frac{1}{6} - \frac{1}{12}$

50. $\frac{1}{2} \times \frac{2}{3} \times \frac{3}{4} \times \frac{4}{5}$

53. $\frac{1}{2} - \left(-\frac{1}{3}\right)$

56. $\frac{-4 + \frac{2}{3}}{-\frac{3}{5}}$

59. $\frac{3}{4} \div \left(-\frac{2}{3}\right)$

62. $\frac{\frac{1}{2} - \frac{4}{3}}{\frac{2}{3} - \frac{1}{3}}$

65. $\frac{-3}{5} - \left(-\frac{2}{5}\right)$

68. $\frac{-4 + \frac{5}{6}}{-\frac{3}{2} + 2}$

71. $\frac{3 - \left(-\frac{2}{3}\right)}{\frac{4}{5}}$

74. $\frac{-3 \times \frac{4}{7}}{\frac{3}{2} \times (-1)}$

3. $\frac{3}{5} \times \frac{2}{7}$

6. $\frac{9}{10} - \frac{2}{5}$

9. $\frac{11}{15} + \frac{7}{20}$

12. $\frac{9}{10} \div \frac{3}{5}$

15. $\frac{5}{8} \times \frac{16}{25}$

18. $\frac{9}{14} - \frac{3}{7}$

21. $\frac{3}{8} \times \frac{4}{9}$

24. $\frac{4}{7} - \frac{2}{7}$

27. $\frac{3}{4} + \frac{5}{8}$

30. $\frac{5}{7} \div \frac{10}{21}$

33. $\frac{2}{5} \times \frac{5}{6} \times \frac{3}{4}$

36. $\frac{5}{6} \times \frac{3}{10} \div \frac{1}{2}$

39. $\frac{3}{7} + \frac{4}{7} \times \frac{2}{3}$

42. $\frac{\frac{2}{5}}{4}$

45. $\frac{7}{8}$

48. $\frac{2}{3} \times \frac{3}{4} \times \frac{4}{5}$

51. $\frac{3}{5} + \frac{2}{7} - \frac{1}{10}$

54. $\frac{-2}{3} \times \frac{3}{4}$

57. $\frac{\frac{2}{5} \times \left(-\frac{3}{2}\right)}{4 + \frac{1}{2}}$

60. $\frac{-5}{6} + \frac{7}{8} - \frac{1}{4}$

63. $\frac{-2 \times \frac{3}{4}}{\frac{1}{2} + \left(-\frac{2}{3}\right)}$

66. $\frac{7}{8} \div \frac{-7}{16}$

69. $\frac{1}{2} + \frac{-1}{3} - \frac{1}{6}$

72. $\frac{-\frac{1}{2} \times \left(-\frac{2}{5}\right) \times \frac{3}{4}}{2 + \frac{3}{4} - 1}$

75. $\frac{\frac{1}{4} + \left(-\frac{2}{3}\right)}{2 - \left(-\frac{2}{3}\right)}$

Que.2: Sum, Difference, Product, Quotient of Decimals

- | | | |
|--|---------------------------------------|--|
| 1. $3.2 + 5.7$ | 2. $12.4 - 7.9$ | 3. 4.5×2.3 |
| 4. $8.4 \div 2.1$ | 5. $15.67 + 9.23$ | 6. $20.5 - 13.78$ |
| 7. 3.14×0.6 | 8. $9.6 \div 1.2$ | 9. $0.45 + 0.78$ |
| 10. $6.89 - 2.34$ | 11. 7.2×1.5 | 12. $15.3 \div 0.9$ |
| 13. $23.456 + 17.84$ | 14. $45.67 - 29.082$ | 15. 0.25×0.8 |
| 16. $18.9 \div 0.63$ | 17. $1.24 + 5.678$ | 18. $9.87 - 4.56$ |
| 19. 2.5×3.2 | 20. $12.48 \div 3.9$ | 21. $67.89 + 34.213$ |
| 22. $100.5 - 78.92$ | 23. 0.9×0.09 | 24. $24.6 \div 1.5$ |
| 25. $3.141 + 2.718$ | 26. $15.99 - 7.88$ | 27. 4.8×6.7 |
| 28. $36.72 \div 4.2$ | 29. $123.456 + 789.123$ | 30. $50.05 - 19.99$ |
| 31. $0.5 + 0.25$ | 32. $1.75 - 0.5$ | 33. 2.4×1.2 |
| 34. $5.6 \div 1.4$ | 35. $8.9 + 3.1$ | 36. $10.0 - 4.5$ |
| 37. 0.75×0.75 | 38. $6.4 \div 0.8$ | 39. $2.02 + 3.03$ |
| 40. $7.07 - 2.02$ | 41. 1.1×1.1 | 42. $9.9 \div 0.9$ |
| 43. $4.44 + 5.55$ | 44. $6.66 - 3.33$ | 45. 0.08×0.8 |
| 46. $12.12 \div 1.2$ | 47. $0.009 + 0.001$ | 48. $0.111 - 0.011$ |
| 49. 0.2×0.02 | 50. $0.5 \div 0.05$ | 51. $12.24 - 0.23 + 3.4 - 4.3$ |
| 52. $-2.5 + 3.7$ | 53. $4.8 \div 1.2 \times 0.5$ | 54. $\frac{5.6-2.4}{0.8}$ |
| 55. $1.25 \times (0.8 + 0.2)$ | 56. $-3.2 + 4.5 - 1.3$ | 57. $\frac{2.5 \times 0.4}{0.5-0.3}$ |
| 58. $0.75 \div 0.25 + 1.5$ | 59. $-1.8 \times 0.5 + 2.4$ | 60. $\frac{3.6}{-1.2} \times 0.5$ |
| 61. $2.0 - (0.5 \times 1.0)$ | 62. $\frac{4.5+1.5}{-0.6}$ | 63. $0.9 \times 0.9 - 0.1 \times 0.1$ |
| 64. $-5.4 \div 1.8 + 3.0$ | 65. $\frac{1.2 \times 0.6}{0.4+0.2}$ | 66. $3.3 - 1.1 \times 0.3$ |
| 67. $\frac{-2.8+0.8}{0.5}$ | 68. $0.6 \times (1.5 - 0.5) + 0.4$ | 69. $\frac{0.8 \div 0.2}{-1.0+1.5}$ |
| 70. $-0.7 \times 0.7 + 0.3 \times 0.3$ | 71. $2.4 \div 0.8 - 1.2 \times 0.5$ | 72. $\frac{3.0-1.5}{0.75 \times 2.0}$ |
| 73. $1.6 + (-0.4) \times 2.5$ | 74. $\frac{-4.2}{-0.7} + 1.4$ | 75. $0.25 \times 0.25 \div 0.05$ |
| 76. $\frac{2.1+0.9}{-0.3 \times 0.2}$ | 77. $-1.5 + 2.5 \times 0.4$ | 78. $\frac{0.9 \times 0.9}{-0.3} - 0.6$ |
| 79. $4.0 \div (2.0 - 0.5)$ | 80. $\frac{-3.5+1.5}{0.5 \times 0.4}$ | 81. $-2.0 \times 0.5 + 3.0 - 1.0 \times 0.5$ |

Que.3: Convert Decimal to Fraction and Fraction to Decimal

- | | | |
|--|---------------------------------------|--|
| 1. Convert 0.75 to a fraction | 2. Convert $\frac{3}{4}$ to a decimal | 3. Convert 0.2 to a fraction |
| 4. Convert $\frac{1}{5}$ to a decimal | 5. Convert 0.625 to a fraction | 6. Convert $\frac{5}{8}$ to a decimal |
| 7. Convert 0.4 to a fraction | 8. Convert $\frac{2}{5}$ to a decimal | 9. Convert 0.875 to a fraction |
| 10. Convert $\frac{7}{8}$ to a decimal | 11. Convert 0.3 to a fraction | 12. Convert $\frac{2}{3}$ to a decimal |

Que.4: Complex Calculations

- | | | |
|---|---|--|
| 1. $\frac{5.6}{0.7} + 1.5 \times 0.3$ | 2. $0.6 \times 0.9 - 0.3 \times 0.2$ | 3. $\frac{3}{4} + \frac{1}{2} \times \frac{2}{3}$ |
| 4. $2.5 \times (3.2 - 1.8) + 0.4$ | 5. $\frac{5}{6} \div \frac{2}{3} - \frac{1}{4}$ | 6. $\frac{4.8}{1.2 \times 2}$ |
| 7. $0.8 \times (0.5 + 0.3) - 0.2$ | 8. $\frac{7}{8} - \frac{1}{4} \times \frac{3}{5}$ | 9. $\frac{3.6}{0.9} + 2.4 \times 0.5$ |
| 10. $\frac{2}{5} + \frac{3}{10} \div \frac{3}{5}$ | 11. $1.2 \times (2.5 - 1.5) + 0.6$ | 12. $\frac{4}{7} \times \frac{7}{8} - \frac{1}{2}$ |

- | | | |
|---|--|---|
| 13. $\frac{0.027}{0.003} + 0.9$ | 14. $\frac{5}{9} + \frac{2}{3} \times \frac{3}{4}$ | 15. $2.4 \times 1.5 - \frac{0.6}{0.3}$ |
| 16. $\left(\frac{1}{2} + \frac{1}{3}\right) \times \frac{3}{4}$ | 17. $2.5 + 3.5 \times 2 - 1.5$ | 18. $\frac{4}{5} - \frac{2}{5} \times \frac{1}{2}$ |
| 19. $\frac{0.75}{0.25} + 0.5$ | 20. $(1.2 \times 0.8) + 0.4$ | 21. $\frac{3}{8} + \frac{1}{4} \div \frac{1}{2}$ |
| 22. $4.2 - 1.2 \times 0.5$ | 23. $\left(\frac{2}{3} \times \frac{3}{4}\right) - \frac{1}{6}$ | 24. $0.9 + \frac{0.1}{0.01}$ |
| 25. $3.14 \times (2.0 - 1.0)$ | 26. $\frac{5}{6} - \frac{1}{3} \times \frac{2}{5}$ | 27. $\frac{1.5}{0.5} + 2.5$ |
| 28. $\left(\frac{3}{4} + \frac{1}{2}\right) \div \frac{5}{8}$ | 29. $2.0 \times 1.5 - 0.5 \times 0.5$ | 30. $\frac{7}{10} + \frac{3}{5} - \frac{1}{2}$ |
| 31. $0.6 \times 0.4 + \frac{0.2}{0.1}$ | 32. $\left(\frac{1}{2} \times \frac{2}{3}\right) + \frac{1}{6}$ | 33. $3.3 - 1.1 \times 0.3$ |
| 34. $\frac{4}{9} \div \frac{2}{3} + \frac{1}{3}$ | 35. $0.8 + 0.2 \times 0.5$ | 36. $(2.5 - 1.5) \times 0.4$ |
| 37. $\frac{5}{7} - \frac{2}{7} \times \frac{3}{4}$ | 38. $\frac{1.25}{0.25} - 0.5$ | 39. $\left(\frac{3}{5} + \frac{2}{5}\right) \times \frac{5}{6}$ |
| 40. $0.7 \times 0.7 + 0.3 \times 0.3$ | 41. $\frac{1}{4} + \frac{1}{2} \times \frac{3}{4}$ | 42. $2.2 - \frac{0.2}{0.1}$ |
| 43. $(1.0 + 0.5) \times 0.2$ | 44. $\frac{2}{3} \div \frac{4}{5} - \frac{1}{5}$ | 45. $0.9 \times (1.1 - 0.1)$ |
| 46. $\frac{7}{8} - \frac{1}{8} \times \frac{2}{7}$ | 47. $3.0 + 2.0 \times 1.5$ | 48. $\left(\frac{5}{6} - \frac{1}{3}\right) \div \frac{1}{2}$ |
| 49. $\frac{0.4}{0.2} + 0.6 \times 0.3$ | 50. $\frac{3}{4} \times \frac{4}{5} - \frac{1}{5}$ | 51. $\frac{5.6}{-0.7} + 1.5 \times (-0.3)$ |
| 52. $0.6 \times (-0.9) - \frac{1}{2} \times 0.2$ | 53. $\frac{3}{4} + \left(-\frac{1}{2}\right) \times \frac{2}{3}$ | 54. $2.5 \times \left(3.2 - \frac{1.8}{0.9}\right) + 0.4$ |

Que.5: Arrange the following numbers in increasing order

- | | |
|--|---|
| 1. 3, -2, 1, 0, 4 | 2. 0.5, 0.25, 0.75, 0.1, 0.9 |
| 3. $\frac{1}{2}, \frac{3}{4}, \frac{2}{5}, \frac{1}{3}, \frac{4}{5}$ | 4. -1.5, -2.5, -0.5, -1.0, -2.0 |
| 5. 2.3, -1.2, 0, $\frac{5}{2}$, -0.3 | 6. $\frac{3}{4}, 0.75, \frac{2}{3}, 0.6, \frac{5}{6}$ |
| 7. -3, 2, -1, 0, 1 | 8. 0.01, 0.012, 0.015, 0.15, 0.2 |
| 9. $\frac{1}{4}, -\frac{1}{4}, \frac{1}{2}, -\frac{1}{2}, \frac{3}{4}$ | 10. -2.5, 1.5, -1.5, 2.5, 0 |
| 11. -0.123, -0.01, -0.122, -0.1, -0.12 | 12. $\frac{2}{3}, \frac{3}{4}, \frac{5}{6}, \frac{1}{2}, \frac{7}{8}$ |
| 13. -0.75, -0.25, 0.25, 0.75, -1.25 | 14. $\frac{1}{3}, 0.3, \frac{2}{5}, 0.4, \frac{1}{2}$ |

Answer Key

Que.1: Sum, Difference, Product, Quotient of Fractions

- | | | | | | |
|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1. $\frac{11}{12}$ | 2. $\frac{1}{2}$ | 3. $\frac{6}{35}$ | 4. $\frac{2}{3}$ | 5. $\frac{31}{24}$ | 6. $\frac{1}{2}$ |
| 7. $\frac{3}{8}$ | 8. $\frac{1}{4}$ | 9. $\frac{13}{12}$ | 10. $\frac{3}{16}$ | 11. $\frac{8}{5}$ | 12. $\frac{3}{2}$ |
| 13. $\frac{31}{18}$ | 14. $\frac{19}{36}$ | 15. $\frac{2}{5}$ | 16. $\frac{4}{3}$ | 17. $\frac{29}{16}$ | 18. $\frac{3}{14}$ |
| 19. $\frac{7}{10}$ | 20. $\frac{1}{3}$ | 21. $\frac{1}{6}$ | 22. 2 | 23. $\frac{11}{15}$ | 24. $\frac{2}{7}$ |
| 25. $\frac{1}{2}$ | 26. $\frac{2}{3}$ | 27. $\frac{11}{8}$ | 28. $\frac{5}{9}$ | 29. $\frac{3}{5}$ | 30. $\frac{3}{2}$ |
| 31. 1 | 32. $\frac{1}{2}$ | 33. $\frac{1}{4}$ | 34. $\frac{18}{25}$ | 35. $\frac{5}{8}$ | 36. $\frac{1}{2}$ |
| 37. $\frac{11}{6}$ | 38. $-\frac{1}{10}$ | 39. $\frac{17}{21}$ | 40. 1 | 41. $\frac{2}{3}$ | 42. $\frac{1}{10}$ |
| 43. 3 | 44. $\frac{9}{10}$ | 45. $\frac{7}{16}$ | 46. $\frac{15}{2}$ | 47. $\frac{1}{3}$ | 48. $\frac{2}{5}$ |
| 49. $\frac{9}{16}$ | 50. $\frac{1}{5}$ | 51. $\frac{11}{14}$ | 52. $-\frac{7}{20}$ | 53. $\frac{5}{6}$ | 54. $-\frac{1}{2}$ |
| 55. $\frac{7}{2}$ | 56. $\frac{50}{9}$ | 57. $-\frac{2}{15}$ | 58. $\frac{16}{33}$ | 59. $-\frac{9}{8}$ | 60. $-\frac{5}{24}$ |
| 61. $-\frac{1}{3}$ | 62. $-\frac{5}{2}$ | 63. 9 | 64. $-\frac{5}{2}$ | 65. $-\frac{1}{5}$ | 66. -2 |
| 67. $-\frac{5}{36}$ | 68. $-\frac{19}{3}$ | 69. 0 | 70. 1 | 71. $\frac{55}{12}$ | 72. $\frac{3}{35}$ |

73. $-\frac{1}{3}$

74. $\frac{18}{7}$

75. $-\frac{5}{32}$

Que.2: Sum, Difference, Product, Quotient of Decimals

1. 8.9

2. 4.5

3. 10.35

4. 4

5. 24.9

6. 6.72

7. 1.884

8. 8

9. 1.23

10. 4.55

11. 10.8

12. 17

13. 41.296

14. 16.588

15. 0.2

16. 30

17. 6.918

18. 5.31

19. 8

20. 3.2

21. 102.103

22. 21.58

23. 0.081

24. 16.4

25. 5.859

26. 8.11

27. 32.16

28. 8.7428...

29. 912.579

30. 30.06

31. 0.75

32. 1.25

33. 2.88

34. 4

35. 12

36. 5.5

37. 0.5625

38. 8

39. 5.05

40. 5.05

41. 1.21

42. 11

43. 9.99

44. 3.33

45. 0.064

46. 10.1

47. 0.01

48. 0.1

49. 0.004

50. 10

51. 11.11

52. 1.2

53. 2

54. 4

55. 1.25

56. 0

57. 5

58. 4.5

59. 1.5

60. -1.5

61. 1.5

62. -10

63. 0.8

64. 0

65. 1.2

66. 2.97

67. -4

68. 1

69. 8

70. -0.4

71. 2.4

72. 1

73. 0.6

74. 7.4

75. 1.25

76. -50

77. -0.5

78. -3.3

79. $\frac{8}{3}$

80. -10

81. 1.5

Que.3: Convert Decimal to Fraction and Fraction to Decimal

1. $\frac{3}{4}$

2. 0.75

3. $\frac{1}{5}$

4. 0.2

5. $\frac{5}{8}$

6. 0.625

7. $\frac{2}{5}$

8. 0.4

9. $\frac{7}{8}$

10. 0.875

11. $\frac{3}{10}$

12. 0.66

Que.4: Complex Calculations

1. 8.45

2. 0.48

3. $\frac{13}{12}$

4. 3.9

5. 1

6. 2

7. 0.44

8. $\frac{29}{40}$

9. 5.2

10. $\frac{9}{10}$

11. 1.8

12. 0

13. 9.9

14. $\frac{19}{18}$

15. 1.6

16. $\frac{5}{8}$

17. 8

18. $\frac{3}{5}$

19. 3.5

20. 1.36

21. $\frac{7}{8}$

22. 3.6

23. $\frac{1}{3}$

24. 10.9

25. 3.14

26. $\frac{7}{10}$

27. 5.5

28. 2

29. 2.75

30. $\frac{4}{5}$

31. 2.24

32. $\frac{1}{2}$

33. 2.97

34. 1

35. 0.9

36. 0.4

37. $\frac{1}{2}$

38. 4.5

39. $\frac{5}{6}$

40. 0.58

41. $\frac{5}{8}$

42. 0.2

43. 0.3

44. $\frac{19}{30}$

45. 0.9

46. $\frac{47}{56}$

47. 6

48. 1

49. 2.18

50. $\frac{2}{5}$

51. -8.45

52. -0.64

53. $\frac{5}{12}$

54. 3.4

Que.5: Arrange the following numbers in increasing order

1. -2, 0, 1, 3, 4

2. 0.1, 0.25, 0.5, 0.75, 0.9

3. $\frac{1}{3}, \frac{2}{5}, \frac{1}{2}, \frac{3}{4}, \frac{4}{5}$

4. -2.5, -2.0, -1.5, -1.0, -0.5

5. -1.2, -0.3, 0, 2.3, $\frac{5}{2}$

6. $0.6, \frac{2}{3}, \frac{3}{4}, 0.75, \frac{5}{6}$ (or $0.6, \frac{2}{3}, 0.75, \frac{3}{4}, \frac{5}{6}$)

7. -3, -1, 0, 1, 2

8. 0.01, 0.012, 0.015, 0.15, 0.2

9. $-\frac{1}{2}, -\frac{1}{4}, \frac{1}{4}, \frac{1}{2}, \frac{3}{4}$

10. -2.5, -1.5, 0, 1.5, 2.5

11. -0.123, -0.122, -0.12, -0.1, -0.01

12. $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{5}{6}, \frac{7}{8}$

13. -1.25, -0.75, -0.25, 0.25, 0.75

14. $0.3, \frac{1}{3}, \frac{2}{5}, 0.4, \frac{1}{2}$ (or $0.3, \frac{1}{3}, 0.4, \frac{2}{5}, \frac{1}{2}$)