LESSON 10

Multiplication Of Fractions (Cancelling By Inspection)

Fractions can be multiplied giving reduced answers when like factors in numerators and denominators are cancelled.

Example 1: Multiply $\frac{3}{5} \times \frac{5}{7}$

'5' Appears in both a numerator and denominator and can be cancelled leaving '1's.

$$\frac{3}{\cancel{5}^{1}} \times \frac{\cancel{5}^{1}}{7} = \frac{3}{7}$$

Example 2: Multiply $\frac{3}{5} \times \frac{7}{12}$

3' Divides into 3 '1' time and into 12 '4' times.

$$\frac{\cancel{3}^{1}}{5} \times \frac{7}{\cancel{12}^{4}} = \frac{7}{20}$$

Cancel The Common Factors
Find A Reduced Answer

1. $\frac{3}{\cancel{5}_{1}} \times \frac{\overset{1}{\cancel{5}}}{7} = \frac{3}{7}$	11. $\frac{5}{\cancel{6}_{3}} \times \frac{\overset{1}{\cancel{2}}}{13} = \frac{5}{39}$	21. $\frac{8}{21} \times \frac{7}{9} =$ ____
2. $\frac{9}{11} \times \frac{4}{9} =$ ____	12. $\frac{3}{4} \times \frac{5}{6} =$ ____	22. $\frac{19}{24} \times \frac{3}{17} =$ ____
3. $\frac{5}{12} \times \frac{12}{17} =$ ____	13. $\frac{5}{9} \times \frac{1}{10} =$ ____	23. $\frac{5}{9} \times \frac{3}{8} =$ ____
4. $\frac{4}{7} \times \frac{3}{4} =$ ____	14. $\frac{3}{7} \times \frac{14}{19} =$ ____	24. $\frac{5}{9} \times \frac{11}{15} =$ ____
5. $\frac{12}{19} \times \frac{19}{25} =$ ____	15. $\frac{5}{7} \times \frac{9}{10} =$ ____	25. $\frac{13}{42} \times \frac{7}{8} =$ ____
6. $\frac{2}{7} \times \frac{7}{9} =$ ____	16. $\frac{2}{11} \times \frac{3}{4} =$ ____	26. $\frac{3}{8} \times \frac{2}{5} =$ ____
7. $\frac{4}{25} \times \frac{25}{27} =$ ____	17. $\frac{9}{70} \times \frac{7}{11} =$ ____	27. $\frac{7}{9} \times \frac{5}{28} =$ ____
8. $\frac{8}{9} \times \frac{5}{8} =$ ____	18. $\frac{2}{3} \times \frac{5}{16} =$ ____	28. $\frac{3}{5} \times \frac{11}{12} =$ ____
9. $\frac{14}{83} \times \frac{83}{89} =$ ____	19. $\frac{7}{9} \times \frac{2}{35} =$ ____	29. $\frac{7}{45} \times \frac{5}{8} =$ ____
10. $\frac{17}{98} \times \frac{11}{17} =$ ____	20. $\frac{2}{15} \times \frac{3}{5} =$ ____	30. $\frac{1}{4} \times \frac{2}{7} =$ ____

Cancel The Common Factors
Find A Reduced Answer

31. $\frac{3}{7} \times \frac{19}{12} =$ ____	41. $\frac{9}{49} \times \frac{7}{8} =$ ____	51. $\frac{5}{7} \times \frac{16}{55} =$ ____
32. $\frac{11}{28} \times \frac{7}{15} =$ ____	42. $\frac{5}{18} \times \frac{2}{3} =$ ____	52. $\frac{17}{30} \times \frac{5}{8} =$ ____
33. $\frac{2}{7} \times \frac{5}{12} =$ ____	43. $\frac{7}{8} \times \frac{11}{56} =$ ____	53. $\frac{3}{8} \times \frac{7}{30} =$ ____
34. $\frac{3}{5} \times \frac{7}{9} =$ ____	44. $\frac{5}{21} \times \frac{3}{8} =$ ____	54. $\frac{5}{7} \times \frac{13}{45} =$ ____
35. $\frac{3}{14} \times \frac{2}{5} =$ ____	45. $\frac{2}{3} \times \frac{13}{20} =$ ____	55. $\frac{2}{10} \times \frac{2}{9} =$ ____
36. $\frac{8}{35} \times \frac{7}{15} =$ ____	46. $\frac{5}{7} \times \frac{18}{35} =$ ____	56. $\frac{7}{9} \times \frac{5}{42} =$ ____
37. $\frac{3}{7} \times \frac{11}{24} =$ ____	47. $\frac{7}{9} \times \frac{11}{70} =$ ____	57. $\frac{3}{7} \times \frac{4}{15} =$ ____
38. $\frac{5}{7} \times \frac{33}{40} =$ ____	48. $\frac{23}{50} \times \frac{5}{9} =$ ____	58. $\frac{16}{25} \times \frac{5}{17} =$ ____
39. $\frac{11}{30} \times \frac{3}{7} =$ ____	49. $\frac{7}{16} \times \frac{2}{9} =$ ____	59. $\frac{7}{9} \times \frac{16}{49} =$ ____
40. $\frac{7}{9} \times \frac{8}{63} =$ ____	50. $\frac{2}{3} \times \frac{7}{8} =$ ____	60. $\frac{5}{18} \times \frac{3}{8} =$ ____

Cancel The Common Factors
Find A Reduced Answer

61. $\frac{2}{15} \times \frac{5}{6} =$ ____	71. $\frac{2}{3} \times \frac{9}{16} =$ ____	81. $\frac{7}{24} \times \frac{3}{56} =$ ____
62. $\frac{5}{6} \times \frac{3}{10} =$ ____	72. $\frac{2}{15} \times \frac{3}{14} =$ ____	82. $\frac{2}{21} \times \frac{7}{18} =$ ____
63. $\frac{2}{63} \times \frac{7}{10} =$ ____	73. $\frac{5}{14} \times \frac{7}{30} =$ ____	83. $\frac{5}{7} \times \frac{21}{25} =$ ____
64. $\frac{5}{9} \times \frac{3}{10} =$ ____	74. $\frac{7}{45} \times \frac{5}{28} =$ ____	84. $\frac{7}{45} \times \frac{5}{42} =$ ____
65. $\frac{2}{5} \times \frac{15}{16} =$ ____	75. $\frac{3}{4} \times \frac{2}{15} =$ ____	85. $\frac{2}{15} \times \frac{5}{18} =$ ____
66. $\frac{3}{20} \times \frac{5}{21} =$ ____	76. $\frac{7}{20} \times \frac{5}{49} =$ ____	86. $\frac{7}{18} \times \frac{0}{63} =$ ____
67. $\frac{2}{9} \times \frac{3}{16} =$ ____	77. $\frac{0}{21} \times \frac{7}{40} =$ ____	87. $\frac{3}{8} \times \frac{2}{9} =$ ____
68. $\frac{5}{14} \times \frac{7}{10} =$ ____	78. $\frac{7}{18} \times \frac{3}{14} =$ ____	88. $\frac{3}{7} \times \frac{14}{27} =$ ____
69. $\frac{5}{18} \times \frac{3}{25} =$ ____	79. $\frac{2}{21} \times \frac{3}{10} =$ ____	89. $\frac{5}{12} \times \frac{3}{20} =$ ____
70. $\frac{2}{7} \times \frac{21}{22} =$ ____	80. $\frac{5}{63} \times \frac{7}{40} =$ ____	90. $\frac{5}{18} \times \frac{3}{35} =$ ____