LESSON 5

Reducing Fractions By Inspection

Any fraction can be reduced when the greatest common factor (gcf) of the numerator and the denominator is greater than 1.

Method 1: Think of the greatest common factor of the two numbers and divide.

Example A: Reduce $\frac{8}{12}$

What is the greatest common factor of 8 and 12. The number 4 divides into both

Divide $4\overline{)8}$ $= 2$

$4\overline{)12}$ $= 3$

Therefore $\frac{8}{12} = \frac{2}{3}$

Example B: Reduce $\frac{30}{35}$

5 divides into both numbers $\frac{30}{35} = \frac{6}{7}$

Reducing Each Fraction
Using The Greatest Common Factor

gcf is 2	gcf is 3	gcf is 4
1. $\frac{6}{10} = \frac{\quad}{\quad}$	11. $\frac{3}{24} = \frac{\quad}{\quad}$	21. $\frac{12}{20} = \frac{\quad}{\quad}$
2. $\frac{8}{18} = \frac{\quad}{\quad}$	12. $\frac{15}{18} = \frac{\quad}{\quad}$	22. $\frac{28}{32} = \frac{\quad}{\quad}$
3. $\frac{10}{26} = \frac{\quad}{\quad}$	13. $\frac{33}{42} = \frac{\quad}{\quad}$	23. $\frac{20}{28} = \frac{\quad}{\quad}$
4. $\frac{12}{14} = \frac{\quad}{\quad}$	14. $\frac{6}{27} = \frac{\quad}{\quad}$	24. $\frac{16}{36} = \frac{\quad}{\quad}$
5. $\frac{30}{32} = \frac{\quad}{\quad}$	15. $\frac{39}{42} = \frac{\quad}{\quad}$	25. $\frac{60}{64} = \frac{\quad}{\quad}$
6. $\frac{14}{20} = \frac{\quad}{\quad}$	16. $\frac{24}{39} = \frac{\quad}{\quad}$	26. $\frac{36}{44} = \frac{\quad}{\quad}$
7. $\frac{18}{22} = \frac{\quad}{\quad}$	17. $\frac{27}{30} = \frac{\quad}{\quad}$	27. $\frac{12}{40} = \frac{\quad}{\quad}$
8. $\frac{16}{18} = \frac{\quad}{\quad}$	18. $\frac{15}{21} = \frac{\quad}{\quad}$	28. $\frac{48}{68} = \frac{\quad}{\quad}$
9. $\frac{24}{26} = \frac{\quad}{\quad}$	19. $\frac{36}{51} = \frac{\quad}{\quad}$	29. $\frac{28}{44} = \frac{\quad}{\quad}$
10. $\frac{22}{30} = \frac{\quad}{\quad}$	20. $\frac{9}{24} = \frac{\quad}{\quad}$	30. $\frac{32}{52} = \frac{\quad}{\quad}$

Reducing Each Fraction
Using The Greatest Common Factor

gcf is 5	gcf is 6	gcf is 7
31. $\frac{10}{15} = \frac{\quad}{\quad}$	41. $\frac{12}{30} = \frac{\quad}{\quad}$	51. $\frac{21}{70} = \frac{\quad}{\quad}$
32. $\frac{35}{40} = \frac{\quad}{\quad}$	42. $\frac{18}{24} = \frac{\quad}{\quad}$	52. $\frac{7}{56} = \frac{\quad}{\quad}$
33. $\frac{15}{20} = \frac{\quad}{\quad}$	43. $\frac{30}{36} = \frac{\quad}{\quad}$	53. $\frac{21}{35} = \frac{\quad}{\quad}$
34. $\frac{20}{45} = \frac{\quad}{\quad}$	44. $\frac{18}{48} = \frac{\quad}{\quad}$	54. $\frac{14}{49} = \frac{\quad}{\quad}$
35. $\frac{25}{30} = \frac{\quad}{\quad}$	45. $\frac{12}{42} = \frac{\quad}{\quad}$	55. $\frac{35}{56} = \frac{\quad}{\quad}$
36. $\frac{15}{55} = \frac{\quad}{\quad}$	46. $\frac{24}{54} = \frac{\quad}{\quad}$	56. $\frac{28}{49} = \frac{\quad}{\quad}$
37. $\frac{10}{35} = \frac{\quad}{\quad}$	47. $\frac{12}{18} = \frac{\quad}{\quad}$	57. $\frac{35}{42} = \frac{\quad}{\quad}$
38. $\frac{5}{30} = \frac{\quad}{\quad}$	48. $\frac{36}{42} = \frac{\quad}{\quad}$	58. $\frac{28}{63} = \frac{\quad}{\quad}$
39. $\frac{25}{40} = \frac{\quad}{\quad}$	49. $\frac{72}{78} = \frac{\quad}{\quad}$	59. $\frac{84}{91} = \frac{\quad}{\quad}$
40. $\frac{35}{60} = \frac{\quad}{\quad}$	50. $\frac{30}{72} = \frac{\quad}{\quad}$	60. $\frac{21}{98} = \frac{\quad}{\quad}$

Reducing Each Fraction
Using The Greatest Common Factor

gcf is 8	gcf is 9	gcf is 10
61. $\frac{16}{24} = \_\_\_\_$	71. $\frac{9}{18} = \_\_\_\_$	81. $\frac{20}{30} = \_\_\_\_$
62. $\frac{32}{40} = \_\_\_\_$	72. $\frac{27}{63} = \_\_\_\_$	82. $\frac{40}{50} = \_\_\_\_$
63. $\frac{16}{56} = \_\_\_\_$	73. $\frac{18}{45} = \_\_\_\_$	83. $\frac{20}{70} = \_\_\_\_$
64. $\frac{24}{64} = \_\_\_\_$	74. $\frac{27}{36} = \_\_\_\_$	84. $\frac{50}{60} = \_\_\_\_$
65. $\frac{8}{24} = \_\_\_\_$	75. $\frac{54}{63} = \_\_\_\_$	85. $\frac{40}{90} = \_\_\_\_$
66. $\frac{32}{72} = \_\_\_\_$	76. $\frac{36}{81} = \_\_\_\_$	86. $\frac{50}{80} = \_\_\_\_$
67. $\frac{24}{40} = \_\_\_\_$	77. $\frac{27}{72} = \_\_\_\_$	87. $\frac{70}{90} = \_\_\_\_$
68. $\frac{56}{72} = \_\_\_\_$	78. $\frac{45}{81} = \_\_\_\_$	88. $\frac{30}{50} = \_\_\_\_$
69. $\frac{16}{88} = \_\_\_\_$	79. $\frac{63}{90} = \_\_\_\_$	89. $\frac{70}{80} = \_\_\_\_$
70. $\frac{56}{96} = \_\_\_\_$	80. $\frac{72}{99} = \_\_\_\_$	90. $\frac{30}{40} = \_\_\_\_$