

## LESSON 20

# Addition Of Unlike Fractions

## (The Common Denominator Is The Product)

Unlike fractions that have denominators with no primes in common (relatively prime) have a common denominator that is the product of the denominators.

Example: Add  $\frac{3}{8} + \frac{2}{5}$

Solution: The common denominator is  $8 \times 5 = 40$ .  
The equivalent fractions are:

$$\frac{3}{8} = \frac{15}{40} \qquad \frac{2}{5} = \frac{16}{40}$$

We can cross multiply

$$\begin{array}{cc} \frac{3}{8} & \times & \frac{2}{5} \\ \hline & & \end{array}$$

$$\frac{15 + 16}{40} = \frac{31}{40}$$

# Add Each Pair Of Unlike Fractions Using The Product Of The Denominators

<p>1. <math>\frac{1}{2} + \frac{1}{3}</math> <math>\frac{3 + 2}{6} = \frac{5}{6}</math></p>	<p>6. <math>\frac{2}{3} + \frac{1}{5}</math> _____ = _____</p>	<p>11. <math>\frac{1}{2} + \frac{4}{9}</math> _____ = _____</p>
<p>2. <math>\frac{2}{3} + \frac{3}{4}</math> _____ = _____</p>	<p>7. <math>\frac{1}{2} + \frac{2}{9}</math> _____ = _____</p>	<p>12. <math>\frac{1}{3} + \frac{5}{8}</math> _____ = _____</p>
<p>3. <math>\frac{1}{2} + \frac{1}{9}</math> _____ = _____</p>	<p>8. <math>\frac{1}{3} + \frac{3}{8}</math> _____ = _____</p>	<p>13. <math>\frac{1}{2} + \frac{2}{5}</math> _____ = _____</p>
<p>4. <math>\frac{2}{3} + \frac{1}{8}</math> _____ = _____</p>	<p>9. <math>\frac{1}{2} + \frac{1}{5}</math> _____ = _____</p>	<p>14. <math>\frac{2}{3} + \frac{3}{5}</math> _____ = _____</p>
<p>5. <math>\frac{1}{2} + \frac{2}{3}</math> _____ = _____</p>	<p>10. <math>\frac{2}{3} + \frac{2}{5}</math> _____ = _____</p>	<p>15. <math>\frac{1}{2} + \frac{5}{9}</math> _____ = _____</p>

# Add Each Pair Of Unlike Fractions Using The Product Of The Denominators

16. $\frac{1}{3} + \frac{7}{8}$ _____ = _____	21. $\frac{1}{4} + \frac{2}{5}$ _____ = _____	26. $\frac{1}{4} + \frac{3}{5}$ _____ = _____
17. $\frac{1}{2} + \frac{3}{5}$ _____ = _____	22. $\frac{1}{2} + \frac{4}{5}$ _____ = _____	27. $\frac{1}{2} + \frac{1}{7}$ _____ = _____
18. $\frac{2}{3} + \frac{4}{5}$ _____ = _____	23. $\frac{1}{3} + \frac{1}{7}$ _____ = _____	28. $\frac{1}{3} + \frac{2}{7}$ _____ = _____
19. $\frac{1}{2} + \frac{7}{9}$ _____ = _____	24. $\frac{1}{3} + \frac{1}{4}$ _____ = _____	29. $\frac{1}{3} + \frac{3}{4}$ _____ = _____
20. $\frac{2}{3} + \frac{1}{7}$ _____ = _____	25. $\frac{2}{3} + \frac{2}{7}$ _____ = _____	30. $\frac{2}{3} + \frac{3}{7}$ _____ = _____

# Add Each Pair Of Unlike Fractions Using The Product Of The Denominators

31. $\frac{1}{4} + \frac{4}{5}$ _____ = _____	36. $\frac{1}{4} + \frac{1}{7}$ _____ = _____	41. $\frac{1}{4} + \frac{2}{7}$ _____ = _____
32. $\frac{1}{2} + \frac{2}{7}$ _____ = _____	37. $\frac{1}{2} + \frac{3}{7}$ _____ = _____	42. $\frac{1}{2} + \frac{4}{7}$ _____ = _____
33. $\frac{1}{3} + \frac{3}{7}$ _____ = _____	38. $\frac{1}{3} + \frac{4}{7}$ _____ = _____	43. $\frac{1}{3} + \frac{5}{7}$ _____ = _____
34. $\frac{1}{3} + \frac{1}{5}$ _____ = _____	39. $\frac{1}{3} + \frac{2}{5}$ _____ = _____	44. $\frac{1}{3} + \frac{3}{5}$ _____ = _____
35. $\frac{2}{3} + \frac{4}{7}$ _____ = _____	40. $\frac{2}{3} + \frac{5}{7}$ _____ = _____	45. $\frac{2}{3} + \frac{6}{7}$ _____ = _____

# Add Each Pair Of Unlike Fractions Using The Product Of The Denominators

46. $\frac{1}{4} + \frac{3}{7}$ _____ = _____	51. $\frac{1}{4} + \frac{4}{7}$ _____ = _____	56. $\frac{1}{4} + \frac{5}{7}$ _____ = _____
47. $\frac{1}{2} + \frac{5}{7}$ _____ = _____	52. $\frac{1}{2} + \frac{6}{7}$ _____ = _____	57. $\frac{1}{4} + \frac{2}{9}$ _____ = _____
48. $\frac{6}{7} + \frac{1}{3}$ _____ = _____	53. $\frac{1}{3} + \frac{1}{8}$ _____ = _____	58. $\frac{1}{4} + \frac{4}{9}$ _____ = _____
48. $\frac{1}{3} + \frac{4}{5}$ _____ = _____	54. $\frac{2}{3} + \frac{1}{4}$ _____ = _____	59. $\frac{1}{3} + \frac{1}{10}$ _____ = _____
50. $\frac{2}{3} + \frac{3}{8}$ _____ = _____	55. $\frac{2}{3} + \frac{5}{8}$ _____ = _____	60. $\frac{2}{3} + \frac{7}{8}$ _____ = _____

# Add Each Pair Of Unlike Fractions Using The Product Of The Denominators

<p>61.</p> $\frac{1}{4} + \frac{6}{7}$ <p>_____ = _____</p>	<p>66.</p> $\frac{1}{4} + \frac{1}{9}$ <p>_____ = _____</p>	<p>71.</p> $\frac{3}{4} + \frac{2}{5}$ <p>_____ = _____</p>
<p>62.</p> $\frac{1}{3} + \frac{3}{10}$ <p>_____ = _____</p>	<p>67.</p> $\frac{1}{3} + \frac{7}{10}$ <p>_____ = _____</p>	<p>72.</p> $\frac{2}{3} + \frac{3}{10}$ <p>_____ = _____</p>
<p>63.</p> $\frac{1}{4} + \frac{5}{9}$ <p>_____ = _____</p>	<p>68.</p> $\frac{3}{4} + \frac{1}{5}$ <p>_____ = _____</p>	<p>73.</p> $\frac{9}{10} + \frac{2}{3}$ <p>_____ = _____</p>
<p>64.</p> $\frac{1}{4} + \frac{7}{9}$ <p>_____ = _____</p>	<p>69.</p> $\frac{2}{3} + \frac{1}{10}$ <p>_____ = _____</p>	<p>74.</p> $\frac{3}{4} + \frac{3}{5}$ <p>_____ = _____</p>
<p>65.</p> $\frac{1}{4} + \frac{1}{5}$ <p>_____ = _____</p>	<p>70.</p> $\frac{1}{3} + \frac{9}{10}$ <p>_____ = _____</p>	<p>75.</p> $\frac{2}{3} + \frac{7}{10}$ <p>_____ = _____</p>