Adding and subtracting fractions with unlike denominators

Watch the sign. Give both fractions the same denominator, then add or subtract.

Name _____ Date _____

1. $\frac{3}{5} - \frac{1}{10} =$

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

3. $\frac{2}{3} + \frac{2}{9} =$

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

5. $\frac{1}{3} - \frac{2}{9} =$

6. $\frac{1}{6} + \frac{2}{5} =$

7. $\frac{5}{8} - \frac{7}{12} =$

8. $\frac{2}{3} - \frac{1}{8} =$

9. $\frac{1}{6} + \frac{3}{4} =$

10. $\frac{1}{2} + \frac{3}{10} =$

11. $\frac{1}{4} - \frac{1}{10} =$

12. $\frac{3}{5} - \frac{1}{2} =$

13. $\frac{1}{9} + \frac{2}{3} =$

14. $\frac{2}{3} + \frac{1}{2} =$

15. $\frac{1}{3} + \frac{3}{5} =$

16. $\frac{1}{2} - \frac{1}{6} =$

17. $\frac{2}{3} - \frac{4}{9} =$

18. $\frac{3}{5} - \frac{1}{6} =$

19. $\frac{4}{9} + \frac{1}{6} =$

20. $\frac{3}{10} + \frac{1}{5} =$

Adding and subtracting fractions with unlike denominators: answer key

Each answer in colour, with the working before it.

1. $\frac{3}{5} - \frac{1}{10} = \frac{6}{10} - \frac{1}{10} = \frac{5}{10} = \frac{1}{2}$

2. $\frac{1}{5} - \frac{1}{6} = \frac{6}{30} - \frac{5}{30} = \frac{1}{30}$

3. $\frac{2}{3} + \frac{2}{9} = \frac{6}{9} + \frac{2}{9} = \frac{8}{9}$

4. $\frac{3}{4} + \frac{2}{3} = \frac{9}{12} + \frac{8}{12} = \frac{17}{12} = 1\frac{5}{12}$

5. $\frac{1}{3} - \frac{2}{9} = \frac{3}{9} - \frac{2}{9} = \frac{1}{9}$

6. $\frac{1}{6} + \frac{2}{5} = \frac{5}{30} + \frac{12}{30} = \frac{17}{30}$

7. $\frac{5}{8} - \frac{7}{12} = \frac{15}{24} - \frac{14}{24} = \frac{1}{24}$

8. $\frac{2}{3} - \frac{1}{8} = \frac{16}{24} - \frac{3}{24} = \frac{13}{24}$

9. $\frac{1}{6} + \frac{3}{4} = \frac{2}{12} + \frac{9}{12} = \frac{11}{12}$

10. $\frac{1}{2} + \frac{3}{10} = \frac{5}{10} + \frac{3}{10} = \frac{8}{10} = \frac{4}{5}$

11. $\frac{1}{4} - \frac{1}{10} = \frac{5}{20} - \frac{2}{20} = \frac{3}{20}$

12. $\frac{3}{5} - \frac{1}{2} = \frac{6}{10} - \frac{5}{10} = \frac{1}{10}$

13. $\frac{1}{9} + \frac{2}{3} = \frac{1}{9} + \frac{6}{9} = \frac{7}{9}$

14. $\frac{2}{3} + \frac{1}{2} = \frac{4}{6} + \frac{3}{6} = \frac{7}{6} = 1\frac{1}{6}$

15. $\frac{1}{3} + \frac{3}{5} = \frac{5}{15} + \frac{9}{15} = \frac{14}{15}$

16. $\frac{1}{2} - \frac{1}{6} = \frac{3}{6} - \frac{1}{6} = \frac{2}{6} = \frac{1}{3}$

17. $\frac{2}{3} - \frac{4}{9} = \frac{6}{9} - \frac{4}{9} = \frac{2}{9}$

18. $\frac{3}{5} - \frac{1}{6} = \frac{18}{30} - \frac{5}{30} = \frac{13}{30}$

19. $\frac{4}{9} + \frac{1}{6} = \frac{8}{18} + \frac{3}{18} = \frac{11}{18}$

20. $\frac{3}{10} + \frac{1}{5} = \frac{3}{10} + \frac{2}{10} = \frac{5}{10} = \frac{1}{2}$