Adding fractions with unlike denominators

Give both fractions the same denominator, then add. Write answers in simplest form.

Name _____ Date _____

1. $\frac{1}{5} + \frac{1}{4} =$

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

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

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

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

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

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

8. $\frac{1}{8} + \frac{1}{4} =$

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

10. $\frac{7}{9} + \frac{3}{4} =$

11. $\frac{1}{8} + \frac{1}{6} =$

12. $\frac{3}{5} + \frac{3}{10} =$

13. $\frac{1}{4} + \frac{7}{10} =$

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

15. $\frac{4}{5} + \frac{3}{4} =$

16. $\frac{5}{9} + \frac{3}{4} =$

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

18. $\frac{1}{12} + \frac{2}{3} =$

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

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

Adding fractions with unlike denominators: answer key

Each answer in colour, with the working before it.

1. $\frac{1}{5} + \frac{1}{4} = \frac{4}{20} + \frac{5}{20} = \frac{9}{20}$

2. $\frac{3}{4} + \frac{1}{10} = \frac{15}{20} + \frac{2}{20} = \frac{17}{20}$

3. $\frac{2}{5} + \frac{3}{10} = \frac{4}{10} + \frac{3}{10} = \frac{7}{10}$

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

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

6. $\frac{1}{4} + \frac{1}{6} = \frac{3}{12} + \frac{2}{12} = \frac{5}{12}$

7. $\frac{2}{3} + \frac{7}{9} = \frac{6}{9} + \frac{7}{9} = \frac{13}{9} = 1\frac{4}{9}$

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

9. $\frac{3}{10} + \frac{1}{3} = \frac{9}{30} + \frac{10}{30} = \frac{19}{30}$

10. $\frac{7}{9} + \frac{3}{4} = \frac{28}{36} + \frac{27}{36} = \frac{55}{36} = 1\frac{19}{36}$

11. $\frac{1}{8} + \frac{1}{6} = \frac{3}{24} + \frac{4}{24} = \frac{7}{24}$

12. $\frac{3}{5} + \frac{3}{10} = \frac{6}{10} + \frac{3}{10} = \frac{9}{10}$

13. $\frac{1}{4} + \frac{7}{10} = \frac{5}{20} + \frac{14}{20} = \frac{19}{20}$

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

15. $\frac{4}{5} + \frac{3}{4} = \frac{16}{20} + \frac{15}{20} = \frac{31}{20} = 1\frac{11}{20}$

16. $\frac{5}{9} + \frac{3}{4} = \frac{20}{36} + \frac{27}{36} = \frac{47}{36} = 1\frac{11}{36}$

17. $\frac{1}{2} + \frac{1}{3} = \frac{3}{6} + \frac{2}{6} = \frac{5}{6}$

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

19. $\frac{1}{5} + \frac{2}{3} = \frac{3}{15} + \frac{10}{15} = \frac{13}{15}$

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