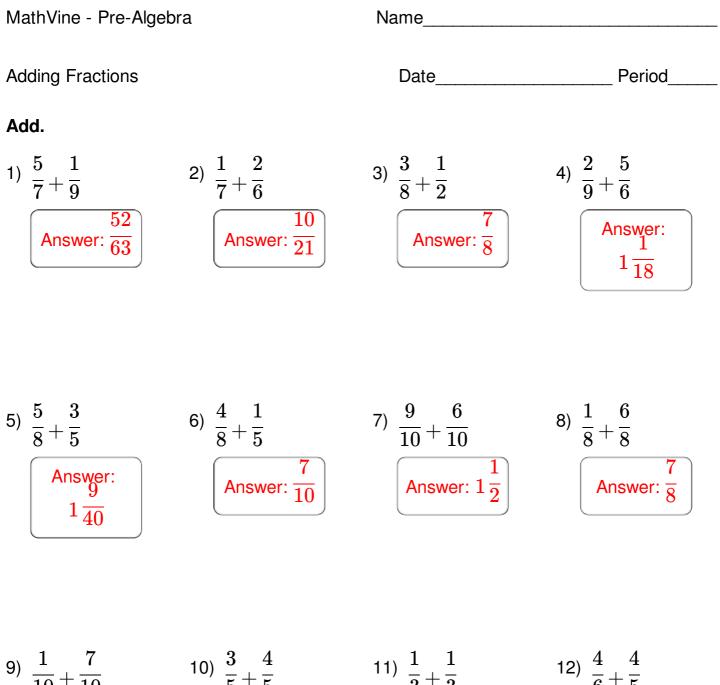
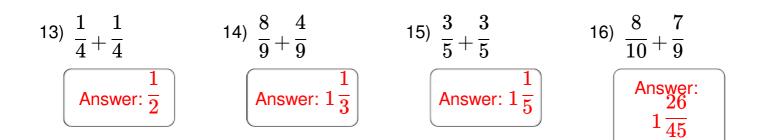
MathVine - Pre-Algebra		Name	
Adding Fractions		Date	Period
Add. 1) $\frac{5}{7} + \frac{1}{9}$	2) $\frac{1}{7} + \frac{2}{6}$	3) $\frac{3}{8} + \frac{1}{2}$	4) $\frac{2}{9} + \frac{5}{6}$
5) $\frac{5}{8} + \frac{3}{5}$	6) $\frac{4}{8} + \frac{1}{5}$	7) $\frac{9}{10} + \frac{6}{10}$	8) $\frac{1}{8} + \frac{6}{8}$
9) $\frac{1}{10} + \frac{7}{10}$	10) $\frac{3}{5} + \frac{4}{5}$	11) $\frac{1}{3} + \frac{1}{3}$	12) $\frac{4}{6} + \frac{4}{5}$
13) $\frac{1}{4} + \frac{1}{4}$	14) $\frac{8}{9} + \frac{4}{9}$	15) $\frac{3}{5} + \frac{3}{5}$	16) $\frac{8}{10} + \frac{7}{9}$





MathVine - Pre-Algebra

Name___

Adding Fractions

Date_____ Period_____

Solution Steps

1)
$$\frac{5}{7} + \frac{1}{9}$$

Since these fractions have different denominators, we need to find the least common multiple of the denominators The least common multiple of 7 and 9 is 63, so we need to multiply to make each of the denominators = 63 $\overline{7}^* \overline{9}^= 63$ 1 7 7 $\overline{9} * \overline{7} = \overline{63}$ Since these fractions have the same denominator. we can just add the numerators 45 7 52 $\overline{63} + \overline{63} = \overline{63}$

2) $\frac{1}{7} + \frac{2}{6}$ Since these fractions have different denominators, we need to find the least common multiple of the denominators The least common multiple of 6 and 7 is 42, so we need to multiply to make each of the denominators = 42 $1 \begin{array}{c} 6 \\ 6 \end{array}$ $\overline{\overline{7}} * \overline{\overline{6}} = \overline{\overline{42}}$ $\overline{\overline{7}} = \overline{\overline{42}}$ $\overline{\overline{14}}$ $\overline{6} * \overline{7} = \overline{42}$ Since these fractions have the same denominator. we can just add the $\stackrel{\text{numerators}}{6} \stackrel{14}{14} 20$ $\overline{\frac{42}{20}} + \overline{42} = \overline{42}$ $\overline{42}$ can be reduced, since 2 is a factor of both $\begin{array}{ccc} 20 & 20 \\ 20 & 2 \end{array}$ and $\begin{array}{ccc} 42 \\ 10 \end{array}$ $\overline{42} \div \overline{2} = \overline{21}$ The fraction is now in lowest terms

3) $\frac{3}{8} + \frac{1}{2}$

Since these fractions have different denominators, we need to find the least common multiple of the denominators The least common multiple of 2 and 8 is 8, so we need to multiply to make each of the denominators = 8 $\overline{8} * \overline{1} = \overline{8}$ 1 4 4 $\overline{2} * \overline{4} = \overline{8}$ Since these fractions have the same denominator. we can just add the numerators $\overline{8} + \overline{8} = \overline{8}$

4) $\frac{2}{9} + \frac{5}{6}$

Since these fractions have different denominators, we need to find the least common multiple of the denominators The least common multiple of 6 and 9 is 18, so we need to multiply to make each of the denominators = 18 $\overline{\frac{9}{5}} * \overline{\frac{2}{3}} = \overline{\frac{18}{15}}$ $\overline{6} * \overline{3} = \overline{18}$ Since these fractions have the same denominator. we can just add the $\substack{ \text{numerators} \\ 4 & 15 }$ 19 $\overline{18} + \overline{18} = \overline{18}$ Because $\overline{18}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number $\overline{18} = 1\overline{18}$

5) $\frac{5}{8} + \frac{3}{5}$

Since these fractions have different denominators, we need to find the least common multiple of the denominators The least common multiple of 5 and 8 is 40, so we need to multiply to make each of the denominators = 40 5 5 25 $\overline{\frac{8}{3}} * \overline{\frac{5}{8}} = \overline{\frac{40}{24}}$ $\overline{5} * \overline{8} = \overline{40}$ Since these fractions have the same denominator, we can just add the $\begin{array}{cc} \text{numerators} \\ 25 & 24 & 49 \end{array}$ $\overline{\overline{40}} + \overline{40} = \overline{40}$ Because $\overline{40}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number

$$\overline{40} = 1\,\overline{40}$$

6) $\frac{4}{8} + \frac{1}{5}$ Since these fractions have different denominators, we need to find the least common multiple of the denominators The least common multiple of 5 and 8 is 40, so we need to multiply to make each of the $\underset{4}{\overset{denominators}{5}} = 40$ $\overline{\frac{8}{1}} * \overline{\frac{5}{5}} = \overline{\frac{40}{8}}$ $\overline{5} * \overline{8} = \overline{40}$ Since these fractions have the same denominator, we can just add the numerators 20 8 28 $\overline{\underline{40}} + \overline{\underline{40}} = \overline{\underline{40}}$ $\overline{40}$ can be reduced, since 4 is a factor of both 28 and 40: $\overline{40} \div \overline{4} = \overline{10}$ The fraction is now in lowest terms

7) $\frac{9}{10} + \frac{6}{10}$

Since these fractions have the same denominator, we can just add the numerators 9 $\underline{10}_{15}^{+} + \overline{10}_{10}^{-} = \overline{10}_{10}^{-}$ $\overline{10}$ can be reduced, since 5 is a factor of both 15 and 10: $\overline{10} \div \overline{5} = \overline{2}$ The fraction is now in lowest terms Because $\overline{2}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number $\overline{2} = 1\overline{2}$

8)
$$\frac{1}{8} + \frac{6}{8}$$

Since these fractions have the same denominator, we can just add the numerators $\frac{1}{8} + \frac{6}{8} = \frac{7}{8}$ 9) $\frac{1}{10} + \frac{7}{10}$ Since these fractions have the same denominator, we can just add the

numerators $\frac{1}{10} + \frac{7}{10} = \frac{8}{10}$ $\frac{1}{10}$ can be reduced, since 2 is a factor of both 8 and 10: $\frac{8}{10} \div \frac{2}{2} = \frac{4}{5}$

The fraction is now in lowest terms

. . . 1

1

10) $\frac{3}{5} + \frac{4}{5}$

Since these fractions have the same denominator, we can just add the numerators

$$\frac{3}{5} + \frac{7}{5} = \frac{7}{5}$$

Because $\overline{5}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number $\frac{7}{2}$

$$\frac{7}{5} = 1\frac{2}{5}$$

8

Δ

3

3

11) $\frac{1}{3} + \frac{1}{3}$

Since these fractions have the same denominator, we can just add the numerators $\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$

12)
$$\frac{4}{6} + \frac{4}{5}$$

Since these fractions have different denominators, we need to find the least common multiple of the denominators The least common multiple of 5 and 6 is 30, so we need to multiply to make each of the denominators = 30 $\overline{\begin{smallmatrix} 6 \\ 4 \end{smallmatrix}} * \overline{\begin{smallmatrix} 5 \\ 5 \end{smallmatrix}} = \overline{\begin{smallmatrix} 30 \\ 24 \end{smallmatrix}}$ $\overline{5} * \overline{6} = \overline{30}$ Since these fractions have the same denominator, we can just add the numerators 20 24 44 $\overline{30} + \overline{30} = \overline{30}$ $\overline{30}$ can be reduced, since 2 is a factor of both 44 and 30: $\overline{30} \div \overline{2} = \overline{15}$ The fraction is now in lowest terms Because $\overline{15}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number $\overline{15} = 1\overline{15}$

8

 $\mathbf{7}$

 $\frac{13}{4} + \frac{1}{4}$

Since these fractions have the same denominator, we can just add the numerators $\frac{1}{4} + \frac{1}{4} = \frac{2}{4}$ $\frac{2}{4}$ can be reduced, since 2 is a factor of both 2 and 4: $\frac{2}{4} \div \frac{2}{2} = \frac{1}{2}$ The fraction is now

in lowest terms

14) $\frac{3}{9} + \frac{1}{9}$

Since these fractions have the same denominator, we can just add the numerators 8 4 12 $\overline{9} + \overline{9} = \overline{9}$ 12 $\overline{9}$ can be reduced, since 3 is a factor of both 12 and 9: $\overline{9} \div \overline{3} = \overline{3}$ The fraction is now in lowest terms Because $\overline{3}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number $\overline{3} = 1\overline{3}$

 $\frac{15}{5} + \frac{5}{5} + \frac{5}{5}$

Since these fractions have the same denominator, we can just add the numerators $\frac{3}{5} + \frac{5}{5} = \frac{5}{5}$ Because $\frac{1}{5}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number $\frac{6}{5} = 1\frac{1}{5}$

 $\frac{16}{10} + \frac{1}{9}$ Since these fractions have different denominators, we need to find the least common multiple of the denominators The least common multiple of 9 and 10 is 90, so we need to multiply to make each of the denominators = 90 $8 \quad 9 \quad 72$ $\frac{\overline{10} * \overline{9}}{7} = \frac{\overline{90}}{70}$ $\overline{9} * \overline{10} = \overline{90}$ Since these fractions have the same denominator, we can just add the numerators 72 70 142 $\begin{array}{c} 90 + \overline{90} = \overline{90} \\ 142 \end{array}$ $\overline{90}$ can be reduced, since $2 \ \mbox{is}$ a factor of both 142and 90: 142 2 71 $\overline{90} \div \overline{2} = \overline{45}$ The fraction is now in lowest terms Because $\overline{45}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number $\overline{45} = 1 \overline{45}$