Adding Fractions

Date_____Period____

Add.

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

2)
$$\frac{1}{6} + \frac{2}{6}$$

3)
$$\frac{1}{2} + \frac{2}{7}$$

4)
$$\frac{8}{10} + \frac{1}{3}$$

5)
$$\frac{1}{3} + \frac{3}{7}$$

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

7)
$$\frac{4}{5} + \frac{3}{5}$$

8)
$$\frac{2}{5} + \frac{5}{8}$$

9)
$$\frac{3}{6} + \frac{1}{6}$$

10)
$$\frac{9}{10} + \frac{3}{9}$$

11)
$$\frac{3}{4} + \frac{2}{4}$$

12)
$$\frac{3}{4} + \frac{3}{4}$$

13)
$$\frac{1}{3} + \frac{1}{3}$$

14)
$$\frac{4}{8} + \frac{2}{6}$$

15)
$$\frac{1}{6} + \frac{2}{4}$$

16)
$$\frac{6}{7} + \frac{1}{3}$$

MathVine - Pre-Algebra

Name

Adding Fractions

Date Period

Add.

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

Answer: $1\frac{1}{2}$

2)
$$\frac{1}{6} + \frac{2}{6}$$

Answer: $\frac{1}{2}$

3)
$$\frac{1}{2} + \frac{2}{7}$$

Answer: $\frac{11}{14}$

4)
$$\frac{8}{10} + \frac{1}{3}$$

5)
$$\frac{1}{3} + \frac{3}{7}$$

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

7)
$$\frac{4}{5} + \frac{3}{5}$$

 $\frac{1}{3} + \frac{3}{7}$ 6) $\frac{1}{8} + \frac{6}{8}$ 7) $\frac{4}{5} + \frac{3}{5}$ 8) $\frac{1}{5}$ Answer: $\frac{16}{21}$ Answer: $\frac{7}{8}$ $\boxed{\text{Answer: } \frac{2}{5}}$

8)
$$\frac{2}{5} + \frac{5}{8}$$

Answer:

9)
$$\frac{3}{6} + \frac{1}{6}$$

10)
$$\frac{9}{10} + \frac{3}{9}$$

 $\frac{3}{6} + \frac{1}{6}$ 10) $\frac{9}{10} + \frac{3}{9}$ 11) $\frac{3}{4} + \frac{2}{4}$ 12) $\frac{3}{4} + \frac{3}{4}$ Answer: $\frac{2}{1}$ $\frac{1}{30}$ Answer: $1\frac{1}{2}$

11)
$$\frac{3}{4} + \frac{2}{4}$$

12)
$$\frac{3}{4} + \frac{3}{4}$$

13)
$$\frac{1}{3} + \frac{1}{3}$$

Answer: $\frac{2}{3}$

14)
$$\frac{4}{8} + \frac{2}{6}$$

Answer: $\frac{3}{6}$

15)
$$\frac{1}{6} + \frac{2}{4}$$

Answer: $\frac{2}{3}$

16)
$$\frac{6}{7} + \frac{1}{3}$$

Answer: $1\frac{4}{21}$

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Name_____

Adding Fractions

Date_____Period____

Solution Steps

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

Since these fractions have the same denominator, we can just add the numerators 6 6 12 $\frac{8}{8} + \frac{8}{8} = \frac{8}{8}$ $\frac{}{8}$ can be reduced, since 4 is a factor of both 12 and 8: 12 $\overline{8} \div \overline{4} = \overline{2}$ The fraction is now in lowest terms Because $\frac{1}{2}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number

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

2)
$$\frac{1}{6} + \frac{2}{6}$$

Since these fractions have the same denominator, we can just add the numerators $\frac{1}{6} + \frac{2}{6} = \frac{3}{6}$ can be reduced, since 3 is a factor of both 3 and 6: $\frac{3}{6} \div \frac{3}{3} = \frac{1}{2}$ The fraction is now

in lowest terms

3)
$$\frac{1}{2} + \frac{2}{7}$$

Since these fractions have different denominators, we need to find the least common multiple of the denominators The least common multiple of 2 and 7 is 14, so we need to multiply to make each of the denominators = 14 7 $\begin{array}{ccc}
2 * \overline{7} &= \overline{14} \\
2 & 2 & 4
\end{array}$ $\frac{7}{7} * \frac{7}{2} = \frac{14}{14}$ Since these fractions have the same denominator, we can just add the numerators 7

 $\overline{14} + \overline{14} = \overline{14}$

4)
$$\frac{8}{10} + \frac{1}{3}$$

Since these

fractions have

different denominators, we need to find the least common multiple of the denominators The least common multiple of 3 and 10 is 30, so we need to multiply to make each of the denominators = 30 $\overline{10} * \overline{3} = \overline{30}$ $\overline{1}$ $\overline{3}*\overline{10}=\overline{30}$ Since these fractions have the same denominator, we can just add the $\begin{array}{ccc} \text{numerators} \\ 24 & 10 & 34 \end{array}$ $\overline{30} + \overline{30} = \overline{30}$ $\overline{30}$ can be reduced, since 2 is a factor of both 34 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 17 $\overline{15} = 1\overline{15}$

5)
$$\frac{1}{3} + \frac{3}{7}$$

Since these fractions have different denominators, we need to find the least common multiple of the denominators The least common multiple of 3 and 7 is 21, so we need to multiply to make each of the denominators = 21 1 - 7 = 21 $\frac{3}{3} * \frac{7}{3} = \frac{21}{9}$ $\overline{7}*\overline{3}=\overline{21}$ Since these fractions have the same denominator. we can just add the numerators 7

 $\overline{21} + \overline{21} = \overline{21}$

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

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

7)
$$\frac{4}{5} + \frac{3}{5}$$

Since these fractions have the same denominator, we can just add the numerators $\frac{4}{5} + \frac{3}{5} = \frac{7}{5}$

Because $\overline{5}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number $\frac{7}{5} = 1\,\overline{5}$

8)
$$\frac{2}{5} + \frac{5}{8}$$

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 $\begin{array}{ccc} \text{denominators} = 40 \\ 2 & 8 & 16 \end{array}$ $\frac{5}{5} * \frac{8}{5} = \frac{40}{25}$ $\overline{8} * \overline{5} = \overline{40}$ Since these fractions have the same denominator,

we can just add the numerators
$$\frac{16}{40} + \frac{25}{40} = \frac{41}{40}$$

Because $\frac{-}{40}$ is an

improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number $\frac{41}{40} = 1\frac{1}{40}$

12)
$$\frac{3}{4} + \frac{3}{4}$$

Since these fractions have the same denominator, we can just add the numerators $\begin{bmatrix} 3 & 3 & 6 \\ -1 & 3 & 6 \end{bmatrix}$

9)
$$\frac{3}{6} + \frac{1}{6}$$

Since these fractions have the same denominator, we can just add the numerators $\frac{3}{6} + \frac{1}{6} = \frac{1}{6}$

10)
$$\frac{9}{10} + \frac{3}{9}$$

Since these fractions have different denominators, we need to find the least common

11)
$$\frac{3}{4} + \frac{2}{4}$$

Since these fractions have the same denominator, we can just add the numerators 3 2 5

 $\frac{6}{6}$ can be reduced, since 2 is a factor of both $\frac{4}{6}$ and $\frac{6}{6}$: $\frac{4}{6} \div \frac{2}{2} = \frac{2}{3}$ The fraction is now in lowest terms 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 $\frac{10}{3} \stackrel{*}{10} = \frac{90}{30}$ $\frac{1}{9} * \frac{1}{10} = \frac{1}{90}$ Since these fractions have the same denominator, we can just add the $\frac{\overline{90} + \overline{90} = \overline{90}}{111}$ $\overline{90}$ can be reduced, since 3 is a factor of both 111 $\overline{90} \div \overline{3} = \overline{30}$

and 90: $\frac{111}{90} \div \frac{3}{3} = \frac{37}{30}$ The fraction is now in lowest terms
Because $\frac{37}{30}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number $\frac{37}{30} = 1\frac{7}{30}$

Because $\frac{4}{4}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number $\frac{5}{4} = 1\frac{1}{4}$

 $\frac{6}{4}$ can be reduced, since 2 is a factor of both $\frac{6}{4}$ and $\frac{4}{5}$: $\frac{6}{4} \cdot \frac{2}{7} = \frac{3}{7}$ The fraction is now in lowest terms
Because $\frac{1}{2}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number $\frac{3}{2} = 1\frac{1}{2}$

13)
$$\frac{1}{3} + \frac{1}{3}$$

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

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

14)
$$\frac{4}{8} + \frac{2}{6}$$

Since these fractions have different denominators, we need to find the least common multiple of the denominators The least common multiple of 6 and 8 is 24, so we need to multiply to make each of the denominators = 24 $\overline{8} * \overline{3} = \overline{24}$ $\overline{6}*\overline{4}=\overline{24}$ Since these fractions have the same denominator. we can just add the $\begin{array}{ccc} \text{numerators} \\ 12 & 8 & 20 \end{array}$ $\frac{\overline{24}}{20} + \overline{24} = \overline{24}$ $\overline{24}$ can be reduced, since 4 is a factor of both 20 and 24: $\overline{24} \div \overline{4} = \overline{6}$ The fraction is now

in lowest terms

15)
$$\frac{1}{6} + \frac{2}{4}$$

Since these fractions have different denominators, we need to find the least common multiple of the denominators The least common multiple of 4 and 6 is 12, so we need to multiply to make each of the denominators = 12 $\overline{rac{6}{2}}*\overline{rac{7}{3}}=\overline{rac{12}{6}}$ $\overline{4}*\overline{3}=\overline{12}$ Since these fractions have the same denominator. we can just add the $\begin{array}{cc} \text{numerators} \\ 2 & 6 \end{array}$ $\frac{12}{8} + \frac{1}{12} = \frac{1}{12}$ $\overline{12}$ can be reduced, since 4 is a factor of both 8_4 and 12: $\overline{12} \div \overline{4} = \overline{3}$ The fraction is now

in lowest terms

16)
$$\frac{6}{7} + \frac{1}{3}$$

Since these fractions have different denominators, we need to find the least common multiple of the denominators The least common multiple of 3 and 7 is 21, so we need to multiply to make each of the denominators = 21 $\overline{7} * \overline{3} = \overline{21}$ $\overline{3}*\overline{7}=\overline{21}$ Since these fractions have the same denominator, we can just add the numerators 18 7 25 $\overline{21} + \overline{21} = \overline{21}$ Because $\frac{1}{21}$ is an improper fraction (the numerator is greater than the denominator), we need to convert it to a mixed number 25

 $\frac{1}{21} = 1\frac{1}{21}$