Subtracting Fractions

Subtract.

1) $\dfrac{1}{3} - \dfrac{3}{5}$

2) $\dfrac{2}{3} - \dfrac{8}{8}$

3) $\dfrac{2}{3} - \dfrac{4}{4}$

4) $\dfrac{2}{8} - \dfrac{5}{9}$

5) $\dfrac{5}{8} - \dfrac{6}{10}$

6) $\dfrac{2}{4} - \dfrac{4}{4}$

7) $\dfrac{3}{9} - \dfrac{1}{9}$

8) $\dfrac{1}{3} - \dfrac{2}{3}$

9) $\dfrac{5}{7} - \dfrac{5}{6}$

10) $\dfrac{3}{6} - \dfrac{5}{6}$

11) $\dfrac{7}{9} - \dfrac{1}{9}$

12) $\dfrac{2}{5} - \dfrac{2}{3}$

13) $\dfrac{4}{6} - \dfrac{3}{6}$

14) $\dfrac{1}{8} - \dfrac{4}{8}$

15) $\dfrac{6}{9} - \dfrac{4}{8}$

16) $\dfrac{5}{8} - \dfrac{3}{8}$

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Name_____

Subtracting Fractions

Date_____ Period_____

Subtract.

1) $\frac{1}{3} - \frac{3}{5}$

Answer:
$-\frac{4}{15}$

2) $\frac{2}{3} - \frac{8}{8}$

Answer:
$-\frac{1}{3}$

3) $\frac{2}{3} - \frac{4}{4}$

Answer:
$-\frac{1}{3}$

4) $\frac{2}{8} - \frac{5}{9}$

Answer:
$-\frac{11}{36}$

5) $\frac{5}{8} - \frac{6}{10}$

Answer: $\frac{1}{40}$

6) $\frac{2}{4} - \frac{4}{4}$

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

7) $\frac{3}{9} - \frac{1}{9}$

Answer: $\frac{2}{9}$

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

Answer:
$-\frac{1}{3}$

9) $\frac{5}{7} - \frac{5}{6}$

Answer:
$-\frac{5}{42}$

10) $\frac{3}{6} - \frac{5}{6}$

Answer:
$-\frac{1}{3}$

11) $\frac{7}{9} - \frac{1}{9}$

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

12) $\frac{2}{5} - \frac{2}{3}$

Answer:
$-\frac{4}{15}$

13) $\dfrac{4}{6} - \dfrac{3}{6}$

Answer: $\dfrac{1}{6}$

14) $\dfrac{1}{8} - \dfrac{4}{8}$

Answer: $-\dfrac{3}{8}$

15) $\dfrac{6}{9} - \dfrac{4}{8}$

Answer: $\dfrac{1}{6}$

16) $\dfrac{5}{8} - \dfrac{3}{8}$

Answer: $\dfrac{1}{4}$

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Name_____

Subtracting Fractions

Date_____ Period_____

Solution Steps

1) $\dfrac{1}{3} - \dfrac{3}{5}$

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

The least common multiple of 3 and 5 is 15, so we need to multiply to make each of the denominators = 15

$\dfrac{1}{3} * \dfrac{5}{5} = \dfrac{5}{15}$

$-\dfrac{3}{5} * \dfrac{3}{3} = -\dfrac{9}{15}$

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

$\dfrac{5}{15} - \dfrac{9}{15} = -\dfrac{4}{15}$

2) $\dfrac{2}{3} - \dfrac{8}{8}$

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

The least common multiple of 3 and 8 is 24, so we need to multiply to make each of the denominators = 24

$\dfrac{2}{3} * \dfrac{8}{8} = \dfrac{16}{24}$

$-\dfrac{8}{8} * \dfrac{3}{3} = -\dfrac{24}{24}$

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

$\dfrac{16}{24} - \dfrac{24}{24} = -\dfrac{8}{24}$

$-\dfrac{8}{24}$ can be reduced, since 8 is a factor of both -8 and 24:

$-\dfrac{8}{24} \div \dfrac{8}{8} = -\dfrac{1}{3}$

The fraction is now in lowest terms

3) $\dfrac{2}{3} - \dfrac{4}{4}$

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

The least common multiple of 3 and 4 is 12, so we need to multiply to make each of the denominators = 12

$\dfrac{2}{3} * \dfrac{4}{4} = \dfrac{8}{12}$

$-\dfrac{4}{4} * \dfrac{3}{3} = -\dfrac{12}{12}$

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

$\dfrac{8}{12} - \dfrac{12}{12} = -\dfrac{4}{12}$

$-\dfrac{4}{12}$ can be reduced, since 4 is a factor of both -4 and 12:

$-\dfrac{4}{12} \div \dfrac{4}{4} = -\dfrac{1}{3}$

The fraction is now in lowest terms

4) $\dfrac{2}{8} - \dfrac{5}{9}$

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

The least common multiple of 8 and 9 is 72, so we need to multiply to make each of the denominators = 72

$\dfrac{2}{8} * \dfrac{9}{9} = \dfrac{18}{72}$

$-\dfrac{5}{9} * \dfrac{8}{8} = -\dfrac{40}{72}$

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

$\dfrac{18}{72} - \dfrac{40}{72} = -\dfrac{22}{72}$

$-\dfrac{22}{72}$ can be reduced, since 2 is a factor of both -22 and 72:

$-\dfrac{22}{72} \div \dfrac{2}{2} = -\dfrac{11}{36}$

The fraction is now in lowest terms

5) $\dfrac{5}{8} - \dfrac{6}{10}$

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

The least common multiple of 8 and 10 is 40, so we need to multiply to make each of the denominators = 40

$$\dfrac{5}{8} * \dfrac{5}{5} = \dfrac{25}{40}$$

$$-\dfrac{6}{10} * \dfrac{4}{4} = -\dfrac{24}{40}$$

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

$$\dfrac{25}{40} - \dfrac{24}{40} = \dfrac{1}{40}$$

6) $\dfrac{2}{4} - \dfrac{4}{4}$

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

$$\dfrac{2}{4} - \dfrac{4}{4} = -\dfrac{2}{4}$$

$-\dfrac{2}{4}$ can be reduced, since 2 is a factor of both -2 and 4:

$$-\dfrac{2}{4} \div \dfrac{2}{2} = -\dfrac{1}{2}$$

The fraction is now in lowest terms

7) $\dfrac{3}{9} - \dfrac{1}{9}$

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

$$\dfrac{3}{9} - \dfrac{1}{9} = \dfrac{2}{9}$$

8) $\dfrac{1}{3} - \dfrac{2}{3}$

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

$$\dfrac{1}{3} - \dfrac{2}{3} = -\dfrac{1}{3}$$

9) $\dfrac{5}{7} - \dfrac{5}{6}$

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

The least common multiple of 6 and 7 is 42, so we need to multiply to make each of the denominators = 42

$$\dfrac{5}{7} * \dfrac{6}{6} = \dfrac{30}{42}$$

$$-\dfrac{5}{6} * \dfrac{7}{7} = -\dfrac{35}{42}$$

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

$$\dfrac{30}{42} - \dfrac{35}{42} = -\dfrac{5}{42}$$

10) $\dfrac{3}{6} - \dfrac{5}{6}$

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

$$\dfrac{3}{6} - \dfrac{5}{6} = -\dfrac{2}{6}$$

$-\dfrac{2}{6}$ can be reduced, since 2 is a factor of both -2 and 6:

$$-\dfrac{2}{6} \div \dfrac{2}{2} = -\dfrac{1}{3}$$

The fraction is now in lowest terms

11) $\dfrac{7}{9} - \dfrac{1}{9}$

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

$$\dfrac{7}{9} - \dfrac{1}{9} = \dfrac{6}{9}$$

$\dfrac{6}{9}$ can be reduced, since 3 is a factor of both 6 and 9:

$$\dfrac{6}{9} \div \dfrac{3}{3} = \dfrac{2}{3}$$

The fraction is now in lowest terms

12) $\dfrac{2}{5} - \dfrac{2}{3}$

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

The least common multiple of 3 and 5 is 15, so we need to multiply to make each of the denominators = 15

$$\dfrac{2}{5} * \dfrac{3}{3} = \dfrac{6}{15}$$

$$-\dfrac{2}{3} * \dfrac{5}{5} = -\dfrac{10}{15}$$

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

$$\dfrac{6}{15} - \dfrac{10}{15} = -\dfrac{4}{15}$$

13) $\dfrac{4}{6} - \dfrac{3}{6}$

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

$$\dfrac{4}{6} - \dfrac{3}{6} = \dfrac{1}{6}$$

14) $\dfrac{1}{8} - \dfrac{4}{8}$

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

$$\dfrac{1}{8} - \dfrac{4}{8} = -\dfrac{3}{8}$$

15) $\dfrac{6}{9} - \dfrac{4}{8}$

Since these fractions have different denominators, we need to find the least common multiple of the denominators
The least common multiple of 8 and 9 is 72, so we need to multiply to make each of the denominators = 72

$$\dfrac{6}{9} * \dfrac{8}{8} = \dfrac{48}{72}$$

$$-\dfrac{4}{8} * \dfrac{9}{9} = -\dfrac{36}{72}$$

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

$$\dfrac{48}{72} - \dfrac{36}{72} = \dfrac{12}{72}$$

$\dfrac{12}{72}$ can be reduced, since 12 is a factor of both 12 and 72:

$$\dfrac{12}{72} \div \dfrac{12}{12} = \dfrac{1}{6}$$

The fraction is now in lowest terms

16) $\dfrac{5}{8} - \dfrac{3}{8}$

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

$$\dfrac{5}{8} - \dfrac{3}{8} = \dfrac{2}{8}$$

$\dfrac{2}{8}$ can be reduced, since 2 is a factor of both 2 and 8:

$$\dfrac{2}{8} \div \dfrac{2}{2} = \dfrac{1}{4}$$

The fraction is now in lowest terms