



BRONZE

Find least common denominator.

1. 6, 30
30

2. 12, 16
48

3. 15, 8
120

Add. State any value(s) that make the expression undefined.

1. $\frac{4}{5} + \frac{7}{5} = \boxed{\frac{11}{5}}$

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

3. $-\frac{3}{1} + \frac{6}{13} = \boxed{\frac{-33}{13}}$

4. $\frac{3}{12} + \frac{5}{8} = \frac{1}{4} + \frac{5}{8} = \boxed{\frac{7}{8}}$

5. $\frac{5}{14} + \frac{2}{9} = \boxed{\frac{73}{126}}$

6. $8 + \frac{2}{5} = \frac{40}{5} + \frac{2}{5} = \boxed{\frac{42}{5}}$

Subtract. State any value(s) that make the expression undefined.

1. $\frac{8}{9} - \frac{2}{11} = \boxed{\frac{70}{99}}$

2. $\frac{7}{12} - \frac{8}{15} = \boxed{\frac{1}{20}}$

3. $\frac{5}{6} - \frac{3}{8} = \boxed{\frac{11}{24}}$

4. $\frac{3}{8} - \frac{17}{36} = \boxed{\frac{-7}{72}}$

5. $\frac{11}{54} - \frac{8}{15} = \boxed{\frac{-89}{270}}$

6. $-2 - \frac{7}{12} = \boxed{\frac{-31}{12}}$

Multiply.

$$1. \frac{\cancel{2}}{3} \cdot \frac{\cancel{2}}{84} = \boxed{\frac{-1}{4}}$$

$$2. \frac{\cancel{2}}{9} \cdot \frac{1}{\cancel{2}} = \boxed{\frac{2}{9}}$$

$$3. \frac{7}{\cancel{12}} \cdot \frac{\cancel{2}}{5} = \boxed{\frac{7}{30}}$$

$$4. \frac{\cancel{5}}{1} \cdot \frac{2}{\cancel{5}} = \boxed{2}$$

$$5. \frac{\cancel{3}}{19} \cdot \frac{3}{\cancel{4}} = \boxed{\frac{9}{19}}$$

$$6. \frac{\cancel{24}}{13} \cdot \frac{\cancel{39}}{\cancel{8}} = \boxed{9}$$

Divide.

$$1. \frac{5}{6} \div \frac{2}{3} = \frac{5}{\cancel{2}} \cdot \frac{\cancel{3}}{2} = \boxed{\frac{5}{4}}$$

$$2. \frac{8}{7} \div 7 = \frac{8}{7} \cdot \frac{1}{7} = \boxed{\frac{8}{49}}$$

$$3. \frac{3}{10} \div \frac{5}{3} = \frac{3}{10} \cdot \frac{3}{5} = \boxed{\frac{9}{50}}$$

$$4. \frac{23}{6} \div \frac{14}{9} = \frac{23}{\cancel{2}} \cdot \frac{9^3}{14} = \boxed{\frac{69}{28}}$$

$$5. \frac{5}{12} \div 5 = \frac{\cancel{5}}{12} \cdot \frac{1}{\cancel{5}} = \boxed{\frac{1}{12}}$$

$$6. \frac{25}{16} \div \frac{20}{48} = \frac{\cancel{25}}{\cancel{16}} \cdot \frac{\cancel{48}^3}{\cancel{20}^4} = \boxed{\frac{15}{4}}$$