

Assignment 8.1

DO THE TOPS  
SAME DENOMINATORS

Find each sum.

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

2)  $\frac{3}{4} + 1\frac{3}{7} = \frac{3}{4} + \frac{10}{7} = \frac{21}{28} + \frac{40}{28} = \frac{61}{28}$

3)  $\frac{5}{8} + \frac{1}{8} = \frac{6}{8} = \frac{3}{4}$

4)  $8\frac{1}{2} + 2\frac{2}{7} = \frac{17}{2} + \frac{16}{7} = \frac{119}{14} + \frac{32}{14} = \frac{151}{14}$

5)  $1 + 3\frac{1}{7} = \frac{7}{7} + \frac{22}{7} = \frac{29}{7} = 4\frac{1}{7}$

6)  $2\frac{3}{4} + 3\frac{5}{8} = \frac{11}{4} + \frac{29}{8} = \frac{22}{8} + \frac{29}{8} = \frac{51}{8} = 6\frac{3}{8}$

Find each difference.

7)  $\frac{11}{7} - \frac{5}{7} = \frac{6}{7}$

8)  $\frac{3}{2} - \frac{8}{7} = \frac{21}{14} - \frac{16}{14} = \frac{5}{14}$

9)  $\frac{4}{3} - \frac{1}{2} = \frac{8}{6} - \frac{3}{6} = \frac{5}{6}$

10)  $4\frac{1}{2} - \frac{2}{3} = \frac{27}{6} - \frac{4}{6} = \frac{23}{6} = 3\frac{5}{6}$

11)  $2\frac{2}{5} - \frac{1}{2} = \frac{12}{5} - \frac{5}{10} = \frac{24}{10} - \frac{5}{10} = \frac{19}{10}$

12)  $\frac{7}{1} - \frac{1}{2} = \frac{14}{2} - \frac{1}{2} = \frac{13}{2} = 6\frac{1}{2}$

Find each product.

13)  $\frac{5}{4} \cdot \frac{1}{3} = \frac{5}{12}$

JUST multiply

14)  $\frac{1}{8} \cdot \frac{1}{2} = \frac{1}{16}$

15)  $2 \cdot \frac{5}{7} = \frac{10}{7} = 1\frac{3}{7}$

16)  $3\frac{2}{3} \cdot \frac{3}{2} = \frac{11}{3} \cdot \frac{3}{2} = \frac{33}{6} = 5\frac{3}{6} = 5\frac{1}{2}$

$$17) 3\frac{1}{9} \cdot \frac{3}{2} = \frac{28}{9} \cdot \frac{3}{2} = \frac{84}{18} = \frac{42}{9} = 4\frac{6}{9} = \boxed{4\frac{2}{3}}$$

$$18) 3\frac{3}{7} \cdot \frac{5}{4} = \frac{24}{7} \cdot \frac{5}{4} = \frac{120}{28} = 4\frac{8}{28} = \boxed{4\frac{2}{7}}$$

Find each quotient. **Flip IT AND multiply**

$$19) \frac{3}{2} \div \frac{3}{2} = \frac{3}{2} \times \frac{2}{3} = \frac{6}{6} = \boxed{1}$$

$$20) \frac{2}{3} \div \frac{3}{4} = \frac{2}{3} \times \frac{4}{3} = \boxed{\frac{8}{9}}$$

$$21) \frac{5}{8} \div \frac{9}{5} = \frac{5}{8} \times \frac{5}{9} = \boxed{\frac{25}{72}}$$

$$22) \frac{11}{8} \div \frac{9}{1} = \frac{11}{8} \times \frac{1}{9} = \boxed{\frac{11}{72}}$$

$$23) \frac{3}{5} \div 1\frac{6}{7} = \frac{3}{5} \div \frac{13}{7} = \frac{3}{5} \times \frac{7}{13} = \boxed{\frac{21}{65}}$$

$$24) \frac{4}{3} \div 5\frac{2}{7} = \frac{4}{3} \div \frac{39}{7} = \frac{4}{3} \times \frac{7}{39} = \boxed{\frac{28}{117}}$$

Evaluate each expression. **BEDMAS**

$$25) 2\frac{1}{2} \div \left(\frac{2 \times 3}{1 \times 3} - \frac{4}{3}\right) \rightarrow \frac{5}{2} \times \frac{3}{2} = \frac{15}{4} = \boxed{3\frac{3}{4}}$$

$$26) (2+4) \cdot 2\frac{1}{3} \div 4 \rightarrow \frac{42}{12} = 3\frac{6}{12} = \boxed{3\frac{1}{2}}$$

$(6) \cdot \frac{7}{3} \div \frac{4}{1}$   
 $(6) \cdot \frac{7}{3} \times \frac{1}{4}$   
 $(6) \cdot \frac{7}{12}$

$$27) \left(1\frac{1}{2} \left(3\frac{4}{5} + 2\frac{1}{4}\right)\right) \div \left(2\frac{2}{3} - 1\right)$$

$$\left(\frac{1}{2} \left(\frac{19 \times 4}{5} + \frac{9}{4}\right)\right) \div \left(2\frac{2}{3} - 1\right) \rightarrow \left(\frac{363}{40}\right) \div \left(\frac{5}{3}\right)$$

$$\left(\frac{1}{2} \left(\frac{76}{20} + \frac{45}{20}\right)\right) \div \left(2\frac{2}{3} - 1\right) \quad \frac{363}{40} \times \frac{3}{5}$$

$$\left(\frac{1}{2} \left(\frac{121}{20}\right)\right) \div \left(2\frac{2}{3} - 1\right) \quad \frac{1089}{200}$$

$$\left(\frac{3}{2} \cdot \frac{121}{20}\right) \div \left(2\frac{2}{3} - 1\right)$$

$$\left(\frac{363}{40}\right) \div \left(2\frac{2}{3} - 1\right)$$

$$\left(\frac{363}{40}\right) \div \left(\frac{8}{3} - \frac{1 \times 3}{1 \times 3}\right)$$

$$\left(\frac{363}{40}\right) \div \left(\frac{8-3}{3}\right)$$

$$\boxed{5\frac{89}{200}}$$

DO INNER-MOST BRACKETS FIRST