

1. Draw a picture to calculate  $\frac{5}{6} \times \frac{1}{3}$



$$\frac{\text{Pieces}}{18 \text{ total}} = \frac{5}{18}$$

2. Solve each. Answer with a reduced fraction (Can be mixed or improper)

a.  $\frac{5}{2} \times (-\frac{3}{10}) = -\frac{15}{4}$

b.  $0.3 + \frac{7}{20} = \frac{3}{10} + \frac{7}{20} = \frac{6}{7}$

c.  $\frac{5}{8} \times \frac{6}{5} \times \frac{10}{9} = \frac{300 \div 10}{360 \div 10} = \frac{30 \div 6}{36 \div 6} = \frac{5}{6}$

d.  $(-2) + (-1\frac{1}{6}) \times (-1\frac{3}{4}) = -2 + \frac{6}{5} \times -\frac{7}{4}$   
 $= -\frac{2}{1} \times -\frac{5}{6} \times \frac{7}{4} = -\frac{70 \div 2}{24 \div 2} = -\frac{35}{12}$

e.  $\frac{5}{9} - \frac{7}{6} \times \frac{5}{21} = \frac{5}{9} - \frac{35}{126} \div 7$   
 $= \frac{5 \cdot 2}{9 \cdot 2} - \frac{5}{18} = \frac{10}{18} - \frac{5}{18}$   
 $= \frac{5}{18}$

f.  $\frac{2}{3} - \frac{5}{3} + 1\frac{3}{4} = \frac{2}{3} - \frac{5}{3} + \frac{7}{4}$   
 $= \frac{2}{3} - \frac{5}{3} \times \frac{4}{7} = \frac{2 \cdot 7}{3 \cdot 7} - \frac{20}{21}$   
 $= \frac{14}{21} - \frac{20}{21} = -\frac{6 \div 3}{21 \div 3} = -\frac{2}{7}$

g.  $(\frac{7}{8})^0 - \frac{2}{7} \times (3\frac{1}{3} - 4\frac{1}{2}) =$   
 $1 - \frac{2}{7} \times (\frac{10 \cdot 2}{3 \cdot 2} - \frac{9 \cdot 2}{2 \cdot 2}) \div 3$   
 $= 1 - \frac{2}{7} \times (\frac{20}{6} - \frac{27}{6})$   
 $= 1 - \frac{2}{7} \times (-\frac{7}{6})$   
 $= 1 + \frac{1}{3} = \frac{3}{3} + \frac{1}{3}$   
 $= \frac{4}{3}$

h.  $(0.8 - \frac{12}{5})^2 - 1\frac{1}{10} =$   
 $(\frac{8}{10} - \frac{12}{5})^2 - \frac{11}{10} = (\frac{4}{5} - \frac{12}{5})^2 - \frac{11}{10}$   
 $= (-\frac{8}{5})^2 - \frac{11}{10} = \frac{64 \cdot 2}{25 \cdot 2} - \frac{11 \cdot 5}{10 \cdot 5}$   
 $= \frac{128}{50} - \frac{55}{50} = \frac{73}{50}$

3. Mr. G is baking cookies for his Pre-Calculus 11 classes. He wants to bake 6 and a half batches of cookies. Each batch needs  $2\frac{1}{3}$  cups of flour. How much flour does Mr. G need to bake all the cookies?  
(Answer with a mixed fraction)

$$6\frac{1}{2} \times 2\frac{1}{3} = \frac{13}{2} \times \frac{7}{3} = \frac{91}{6} = 15\frac{1}{6} \text{ cups}$$

$$6 \overline{) 91} \\ \underline{90} \\ 1$$

4. Mr. G has baked  $6\frac{1}{2}$  batches of cookies for his Pre-Calculus 11 classes. On the way to school, Mr. G drops  $1\frac{1}{6}$  batches of cookies on the ground. Mr. G decides to split the rest of the cookies evenly between his three Pre-Calculus 11 classes. What fraction of a batch of cookies does each class get? (Answer with a mixed fraction)

$$6\frac{1}{2} - 1\frac{1}{6} = \frac{13 \cdot 3}{2 \cdot 3} - \frac{7}{6} = \frac{39}{6} - \frac{7}{6} = \frac{32}{6} = \frac{16}{3} \text{ batches remaining}$$

$$\frac{16}{3} \div 3 = \frac{16}{3} \cdot \frac{1}{3} = \frac{16}{9} = 1\frac{7}{9} \text{ of a batch for each class}$$

$$9 \overline{) 16} \\ \underline{9} \\ 7$$