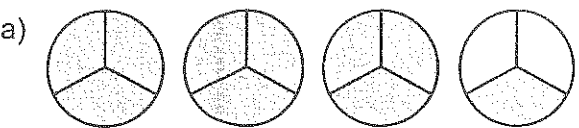


# NS8-11 Mixed and Improper Fractions

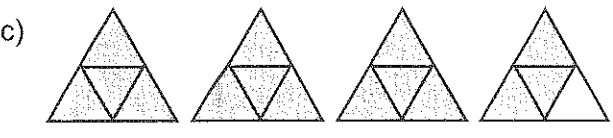
1. Write these fractions as mixed numbers and as improper fractions.

$3\frac{1}{3} = \frac{10}{3}$



b)  $30\frac{6}{8} = \frac{306}{8}$

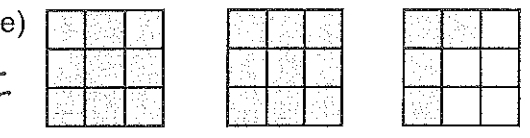
$3\frac{3}{4} = \frac{15}{4}$



d)  $5\frac{2}{7} = \frac{37}{7}$

f)  $1\frac{4}{12} = \frac{16}{12}$

$2\frac{4}{9} = \frac{22}{9}$



2. Shade the amount of pie given by the mixed fraction. Then write an improper fraction for the amount.

a)  $4\frac{1}{2}$    
 Improper fraction:  $\frac{9}{2}$

b)  $3\frac{3}{5}$    
 Improper fraction:  $\frac{18}{5}$

3. Shade the amount of area given by the improper fraction. Then write a mixed number for the amount.

a)  $\frac{11}{3}$    
 Mixed number:  $3\frac{2}{3}$

b)  $\frac{11}{4}$    
 Mixed number:  $2\frac{3}{4}$

c)  $\frac{17}{6}$    
 Mixed number:  $2\frac{5}{6}$

d)  $\frac{21}{8}$    
 Mixed number:  $2\frac{5}{8}$

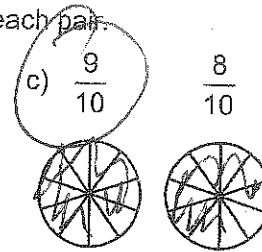
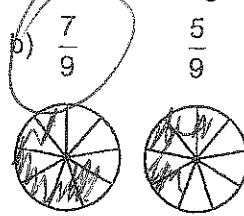
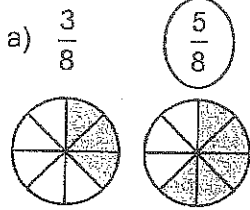
4. Draw a picture to find out which fraction is greater.

a)  $\frac{1}{2}, \frac{2}{3}, \frac{5}{8}$    
 b)  $\frac{14}{5}, \frac{21}{4}, \frac{11}{5}$    
 c)  $\frac{13}{4}, \frac{7}{2}, \frac{2}{3}$    
 d)  $\frac{15}{8}, \frac{13}{5}, \frac{7}{3}$

5. How could you use division to find out how many whole pies are in  $\frac{24}{7}$  of a pie? Explain.   
 $24 \div 7 = 3 R 3 = 3\frac{3}{7}$

# NS8-14 Comparing Fractions — Introduction

1. Shade the given amount in each pie. Then circle the greater fraction in each pair.

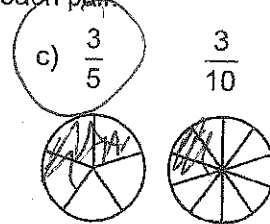
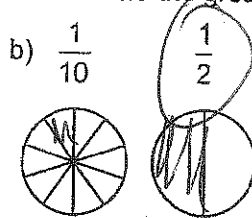
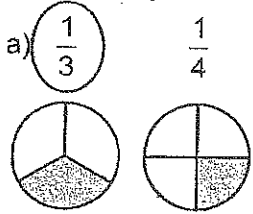


2. Two fractions have the same denominators (bottoms) but different numerators (tops)?

How can you tell which fraction is greater?

The one with the larger numerator.

3. Shade the given amount in each pie. Then circle the greater fraction in each pair.



4. Two fractions have the same numerators (tops) but different denominators (bottoms).

How can you tell which fraction is greater?

The one with the smaller denominator.

5. Write the fractions in order from least to greatest.

a)  $\frac{1}{8}, \frac{1}{3}, \frac{1}{15}$   
 $\frac{1}{15} \quad \frac{1}{8} \quad \frac{1}{3}$

b)  $\frac{2}{9}, \frac{2}{6}, \frac{2}{8}, \frac{2}{12}$   
 $\frac{2}{12} \quad \frac{2}{9} \quad \frac{2}{8} \quad \frac{2}{6}$

c)  $\frac{4}{5}, \frac{1}{5}, \frac{3}{5}$   
 $\frac{1}{5} \quad \frac{3}{5} \quad \frac{4}{5}$

d)  $\frac{9}{10}, \frac{2}{10}, \frac{1}{10}, \frac{5}{10}$   
 $\frac{1}{10} \quad \frac{2}{10} \quad \frac{5}{10} \quad \frac{9}{10}$

e)  $\frac{5}{8}, \frac{7}{8}, \frac{5}{9}$   
 $\frac{5}{9} \quad \frac{5}{8} \quad \frac{7}{8}$

f)  $\frac{4}{7}, \frac{3}{7}, \frac{4}{5}$   
 $\frac{3}{7} \quad \frac{4}{7} \quad \frac{4}{5}$

BONUS ▶  $\frac{15}{19}, \frac{9}{23}, \frac{11}{21}, \frac{11}{19}, \frac{6}{23}, \frac{9}{22}, \frac{15}{17}, \frac{9}{21}, \frac{6}{22}, \frac{9}{23}, \frac{9}{22}, \frac{11}{21}, \frac{11}{19}, \frac{15}{19}, \frac{15}{17}$

6. Which fraction is greater? How do you know?

a)  $\frac{7}{5}$  or  $\frac{9}{5}$        $\frac{9}{5}$       9 > 7

b)  $4\frac{1}{4}$  or  $4\frac{3}{4}$       3 > 1