Compare and order fractions less than 1
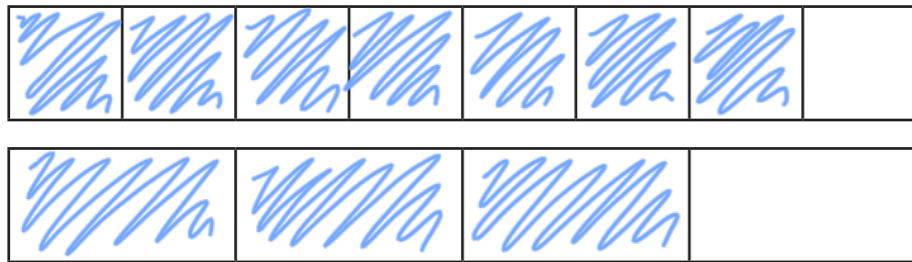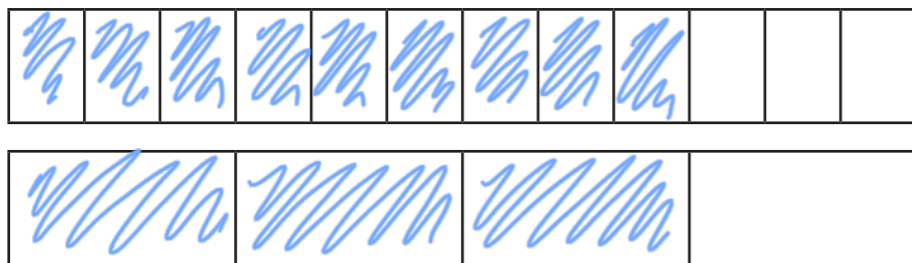
1 Write <, > or = to compare the fractions.
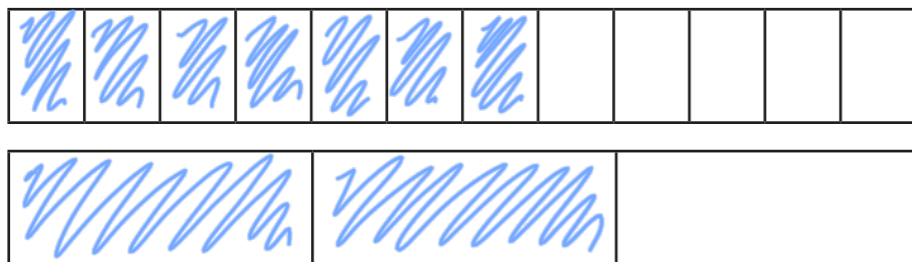
Use the bar models to help you.

$\frac{7}{8}$ ⊙> $\frac{3}{4}$

$\frac{9}{12}$ ⊙= $\frac{3}{4}$

$\frac{7}{12}$ ⊙< $\frac{2}{3}$

2 Write <, > or = to compare the fractions.

a) $\frac{1}{5}$ ⊙< $\frac{4}{15}$

b) $\frac{2}{5}$ ⊙> $\frac{4}{15}$

c) $\frac{2}{5}$ ⊙= $\frac{6}{15}$

d) $\frac{2}{3}$ ⊙> $\frac{6}{15}$

e) $\frac{2}{3}$ ⊙> $\frac{6}{12}$

f) $\frac{2}{3}$ ⊙= $\frac{6}{9}$

g) $\frac{2}{9}$ ⊙< $\frac{1}{3}$

h) $\frac{4}{9}$ ⊙> $\frac{1}{3}$

i) $\frac{4}{12}$ ⊙= $\frac{1}{3}$

j) $\frac{8}{12}$ ⊙= $\frac{2}{3}$

k) $\frac{8}{12}$ ⊙< $\frac{3}{3}$
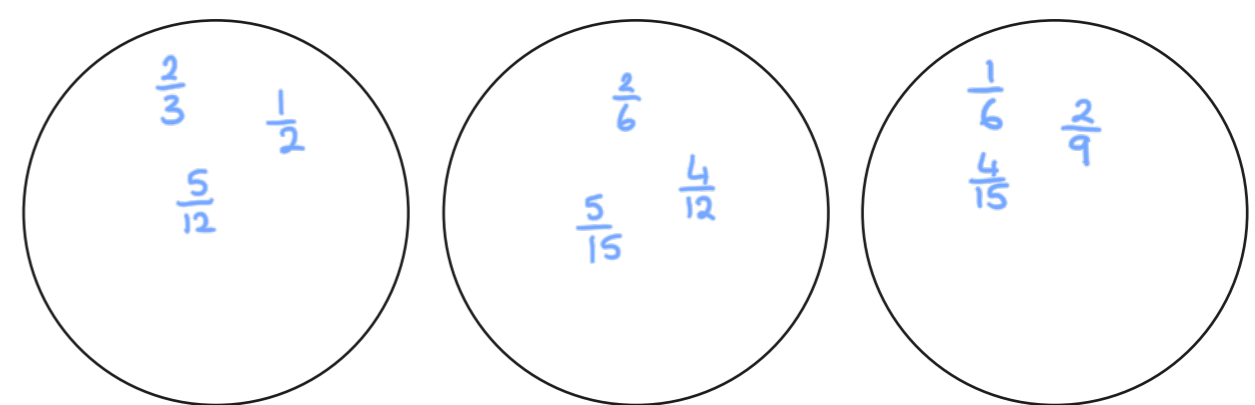
l) $\frac{8}{12}$ ⊙< $\frac{3}{4}$

3 Sort the fractions into the circles.

greater than $\frac{1}{3}$ equal to $\frac{1}{3}$ less than $\frac{1}{3}$

greater than $\frac{1}{3}$: $\frac{2}{3}$ $\frac{1}{2}$ $\frac{5}{12}$

equal to $\frac{1}{3}$: $\frac{2}{6}$ $\frac{4}{12}$ $\frac{5}{15}$

less than $\frac{1}{3}$: $\frac{1}{6}$ $\frac{2}{9}$ $\frac{4}{15}$

$\frac{2}{3}$ $\frac{1}{6}$ $\frac{1}{2}$ $\frac{2}{6}$ $\frac{2}{9}$ $\frac{5}{12}$ $\frac{4}{12}$ $\frac{4}{15}$ $\frac{5}{15}$

4 What could the missing numerators and denominators be?

Write a number in each box to make the statements correct.

e.g.

a) $\dfrac{\boxed{1}}{5} < \dfrac{5}{15}$

d) $\dfrac{\boxed{1}}{3} < \dfrac{5}{6}$

g) $\dfrac{6}{9} < \dfrac{5}{\boxed{6}}$

b) $\dfrac{\boxed{2}}{6} < \dfrac{5}{12}$

e) $\dfrac{3}{5} < \dfrac{5}{\boxed{5}}$

h) $\dfrac{10}{12} < \dfrac{5}{\boxed{4}}$

c) $\dfrac{\boxed{5}}{12} < \dfrac{5}{6}$
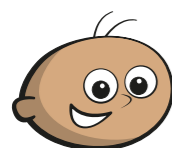
f) $\dfrac{5}{6} < \dfrac{5}{\boxed{5}}$

i) $\dfrac{23}{24} < \dfrac{5}{\boxed{5}}$

Compare answers with a partner.
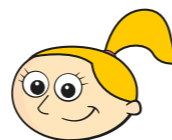
5 Tommy and Eva are comparing fractions.

$$\boxed{\dfrac{2}{3}} \quad \boxed{\dfrac{8}{12}} \quad \boxed{\dfrac{4}{9}}$$

Tommy: I found a common denominator of 36 to compare the fractions.

Eva: I found a common numerator of 4 to compare the fractions.

Whose method is more efficient? ___Various___

Talk about your answer with a partner.

6 Write the fractions in ascending order.

a) $\dfrac{2}{5}, \ \dfrac{2}{7}, \ \dfrac{2}{3}, \ \dfrac{2}{4}, \ \dfrac{2}{10}$

$$\boxed{\dfrac{2}{10}} \quad \boxed{\dfrac{2}{7}} \quad \boxed{\dfrac{2}{5}} \quad \boxed{\dfrac{2}{4}} \quad \boxed{\dfrac{2}{3}}$$

b) $\dfrac{2}{3}, \ \dfrac{5}{9}, \ \dfrac{1}{9}, \ \dfrac{5}{6}, \ \dfrac{2}{9}$

$$\boxed{\dfrac{1}{9}} \quad \boxed{\dfrac{2}{9}} \quad \boxed{\dfrac{5}{9}} \quad \boxed{\dfrac{2}{3}} \quad \boxed{\dfrac{5}{6}}$$

c) $\dfrac{3}{5}, \ \dfrac{7}{10}, \ \dfrac{1}{2}, \ \dfrac{3}{10}, \ \dfrac{1}{5}$

$$\boxed{\dfrac{1}{5}} \quad \boxed{\dfrac{3}{10}} \quad \boxed{\dfrac{1}{2}} \quad \boxed{\dfrac{3}{5}} \quad \boxed{\dfrac{7}{10}}$$

d) $\dfrac{3}{8}, \ \dfrac{6}{17}, \ \dfrac{12}{30}, \ \dfrac{2}{7}, \ \dfrac{1}{3}$

$$\boxed{\dfrac{2}{7}} \quad \boxed{\dfrac{1}{3}} \quad \boxed{\dfrac{6}{17}} \quad \boxed{\dfrac{12}{30}} \quad \boxed{\dfrac{3}{8}}$$

7 What could the missing numerator be?

$$\dfrac{3}{5} < \dfrac{\boxed{}}{15} < \dfrac{9}{10}$$

Write all four possibilities.

$$\boxed{\dfrac{10}{15}} \quad \boxed{\dfrac{11}{15}} \quad \boxed{\dfrac{12}{15}} \quad \boxed{\dfrac{13}{15}}$$