

## Task Bank

### Week 6 Session 1: Comparing Fractions

#### Task 1:

$\frac{6}{7}$  is greater. You can show this in many ways:

① Equate denominators:  $\frac{5}{6} = \frac{35}{42}$

$$\frac{6}{7} = \frac{36}{42}$$

$$\Rightarrow \frac{6}{7} > \frac{5}{6} \text{ as } \frac{36}{42} > \frac{35}{42}$$

② Equate Numerators:  $\frac{5}{6} = \frac{30}{36}$

$$\frac{6}{7} = \frac{30}{35}$$

$$\Rightarrow \frac{6}{7} > \frac{5}{6} \text{ as } \frac{30}{35} > \frac{30}{36}$$

③ Treat fractions as division

$$\frac{5}{6} = 5 \div 6 = 0.8\bar{3}$$

$$\frac{6}{7} = 6 \div 7 = 0.857142$$

$$\Rightarrow \frac{6}{7} > \frac{5}{6}$$

④ Draw accurate bar model or number line.

Use one of these methods on second part to find

a)  $\frac{7}{8} > \frac{4}{5}$

b)  $\frac{5}{9} > \frac{3}{7}$

c)  $\frac{11}{10} > \frac{24}{25}$

d)  $\frac{3}{5} > \frac{4}{7}$

## Task 2

I can find 11 routes to get from  $\frac{9}{5}$  to  $\frac{1}{8}$ . There may well be more though.

I have put a tick at scenarios

where I can go from one square to the next and a cross when you can't. The only squares that are impossible to get to are those with a cross at the top and at the left hand side. Only  $\frac{17}{8}$ ,  $\frac{8}{7}$  and  $\frac{5}{3}$  are like that.

I knew which fractions had the smaller value by using the methods from task 1.

$\frac{9}{5}$ ✓	$\frac{8}{5}$ ✗	$\frac{3}{2}$ ✓	$\frac{4}{3}$ ✓	$\frac{5}{4}$ ✓		
$\frac{3}{2}$ ✓	✗	$\frac{17}{8}$ ✓	$\frac{13}{12}$ ✓	✗	$\frac{5}{3}$ ✓	1 ✓
$\frac{5}{4}$ ✓	✓	$\frac{4}{8}$ ✓	$\frac{5}{6}$ ✓	✗	1 ✓	$\frac{2}{3}$ ✓
$\frac{7}{8}$ ✓	✗	$\frac{8}{7}$ ✓	$\frac{1}{2}$ ✓	$\frac{1}{5}$ ✓	✗	$\frac{1}{4}$ ✓
$\frac{3}{4}$ ✓	✓	$\frac{2}{3}$ ✓	$\frac{1}{3}$ ✓	$\frac{1}{6}$ ✓	$\frac{1}{8}$ ✓	

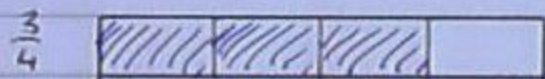
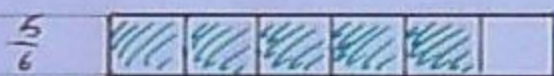
## Task Bank

### Week 6 Session 2: Common Denominators

#### Task 1:

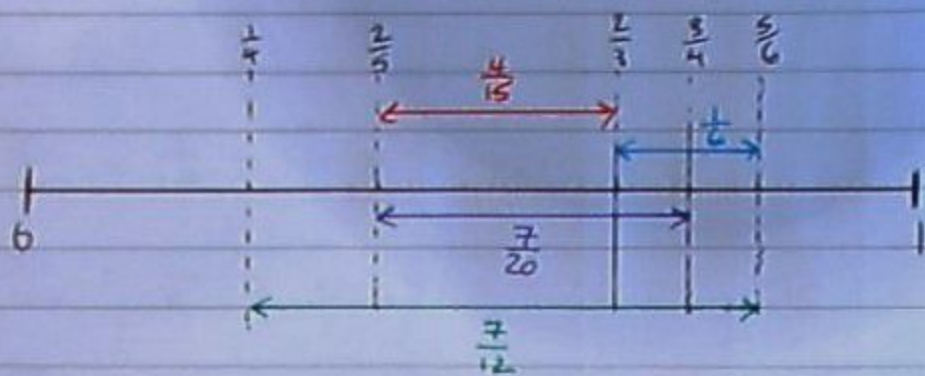
What's the same: - Both have bars representing  $\frac{2}{3}$  and  $\frac{3}{4}$   
- Both have kept the bars an equivalent width

What's different: - On the left the students bars are all different sizes.  
- On the right hand side the student has made the denominators the same and is working in 12's.



I notice that  $\frac{5}{6} > \frac{3}{4}$

## Task 2



## Task Bank

### Week 6 Session 3: Decimal Fractions

#### Task 1

a)  $\frac{30}{100} = \frac{3}{10} = 0.3$

b)  $\frac{25}{100} = \frac{1}{4} = 0.25$

c)  $\frac{68}{100} = \frac{17}{25} = 0.68$

d)  $\frac{47}{100} = 0.47$

#### Task 2

$$\frac{1}{10} = \frac{10}{100}, \quad 0.05 = \frac{5}{100}, \quad 0.5 = \frac{50}{100}, \quad \frac{3}{10} = \frac{30}{100}$$

$$\frac{4}{10} = \frac{40}{100}, \quad \frac{11}{20} = \frac{55}{100}, \quad \frac{15}{100} = \frac{15}{100}, \quad 0.75 = \frac{75}{100}$$

$$\frac{1}{5} = \frac{20}{100}$$

In ascending order:

$$0.05, \frac{1}{10}, \frac{15}{100}, \frac{1}{5}, \frac{3}{10}, \frac{4}{10}, 0.5, \frac{11}{20}, 0.75$$

3 Groups: ①  $\frac{15}{100}, 0.75, \frac{1}{10}$

②  ~~$\frac{15}{100}$~~   ~~$\frac{30}{100}$~~   $0.05, \frac{11}{20}, \frac{4}{10}$


③  $0.5, \frac{3}{10}, \frac{1}{5}$


## Task Bank

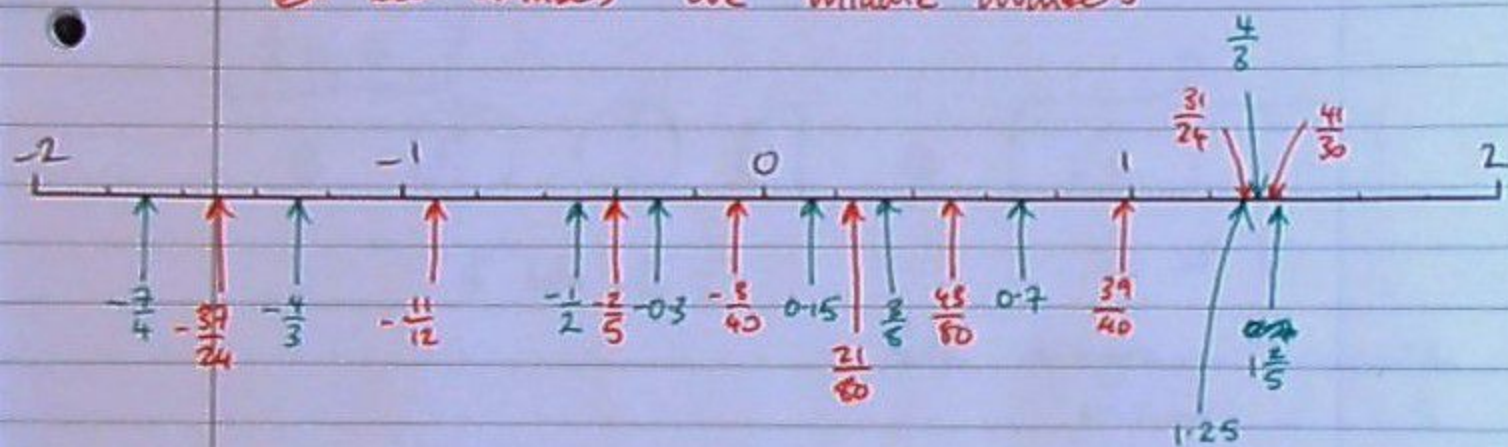
### Week 6 Session 4 : Mixed Comparisons

Task 1: 36 different options here  
Look back to week 6 session 1  
for support.

Task 2:

 Green Numbers are original numbers

 Red numbers are middle numbers



Infinite number of solutions here so I have just provided the midpoint. There are an infinite number of other solutions.