



1) $\frac{5}{8} < \frac{10}{13}$ $\frac{14}{23} > \frac{7}{15}$

$1\frac{3}{4} < 1\frac{6}{7}$ $1\frac{12}{23} < 1\frac{4}{7}$

2) $\frac{4}{3}, \frac{16}{11}, \frac{8}{5}$



- 1) It is more efficient to use common numerators, changing $\frac{3}{7}$ to $\frac{9}{21}$. It is then easy to compare, using the rule that when the numerators are the same, the smaller the denominator, the larger the fraction.
- 2) The numerators of the cut-off pieces are both 2 ($\frac{2}{9}$ and $\frac{2}{11}$). Therefore, it is easy to compare these fractions and say that piece A was longer to begin with as $\frac{2}{9}$ is the bigger fraction.



- 1) One possible solution is shown. There are many possible solutions where the fractions increase in size from the top left corner.

	smallest				biggest
		→			
smallest	$\frac{1}{36}$	$\frac{1}{12}$	$\frac{1}{6}$	$\frac{11}{36}$	$\frac{1}{2}$
	$\frac{1}{9}$	$\frac{5}{36}$	$\frac{2}{9}$	$\frac{7}{18}$	$\frac{7}{12}$
	$\frac{7}{36}$	$\frac{1}{4}$	$\frac{5}{18}$	$\frac{5}{12}$	$\frac{3}{4}$
	$\frac{1}{3}$	$\frac{13}{36}$	$\frac{4}{9}$	$\frac{17}{36}$	$\frac{11}{12}$
biggest	$\frac{11}{18}$	$\frac{2}{3}$	$\frac{5}{6}$	$\frac{8}{9}$	$\frac{17}{18}$

Compare and Order Fractions

I can compare and order fractions using common denominators or common numerators.



1. Put these fractions in order of size, starting with the smallest.

$\frac{3}{4}$

$\frac{6}{7}$

$\frac{3}{8}$

$\frac{6}{11}$

	<		<		<	
--	---	--	---	--	---	--

2. Use any three of these fractions to complete the statement.

$\frac{4}{7}$

$\frac{8}{9}$

$\frac{16}{21}$

$\frac{4}{9}$

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3. Circle all the fractions that are greater than $\frac{1}{2}$ but less than $\frac{3}{4}$.

$\frac{4}{7}$	$\frac{1}{3}$	$\frac{5}{8}$	$\frac{7}{9}$	$\frac{3}{5}$
---------------	---------------	---------------	---------------	---------------

Compare and Order Fractions **Answers**

1. Put these fractions in order of size, starting with the smallest.

$\frac{3}{4}$

$\frac{6}{7}$

$\frac{3}{8}$

$\frac{6}{11}$

$\frac{3}{8}$	<	$\frac{6}{11}$	<	$\frac{3}{4}$	<	$\frac{6}{7}$
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2. Use any three of these fractions to complete the statement.

There are four possible answers:

$$\frac{8}{9} > \frac{16}{21} > \frac{4}{7}$$

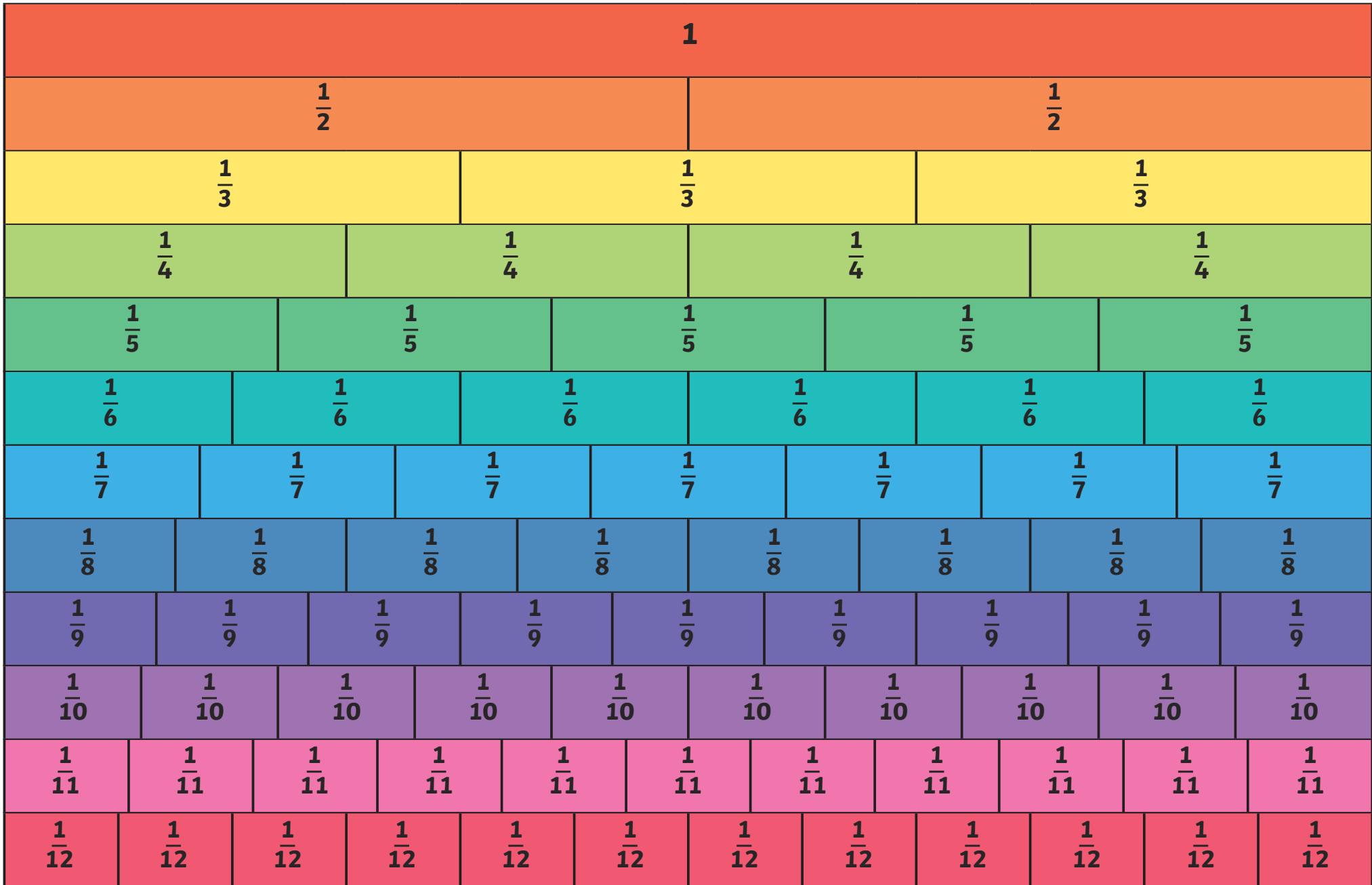
$$\frac{8}{9} > \frac{16}{21} > \frac{4}{9}$$

$$\frac{8}{9} > \frac{4}{7} > \frac{4}{9}$$

$$\frac{16}{21} > \frac{4}{7} > \frac{4}{9}$$

3. Circle all the fractions that are greater than $\frac{1}{2}$ but less than $\frac{3}{4}$.

$\frac{4}{7}$	$\frac{1}{3}$	$\frac{5}{8}$	$\frac{7}{9}$	$\frac{3}{5}$
---------------	---------------	---------------	---------------	---------------





1) Compare these fractions using the < and > symbols. Show your working out using common numerators.

$$\frac{5}{8} \quad \square \quad \frac{10}{13}$$

$$\frac{14}{23} \quad \square \quad \frac{7}{15}$$

<input type="text"/>	<input type="text"/>
<hr/>	<hr/>
<input type="text"/>	<input type="text"/>

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<hr/>	<hr/>
<input type="text"/>	<input type="text"/>

$$1 \frac{3}{4} \quad \square \quad 1 \frac{6}{7}$$

$$1 \frac{12}{23} \quad \square \quad 1 \frac{4}{7}$$

<input type="text"/>	<input type="text"/>
<hr/>	<hr/>
<input type="text"/>	<input type="text"/>

<input type="text"/>	<input type="text"/>
<hr/>	<hr/>
<input type="text"/>	<input type="text"/>

2) Put these fractions in order from smallest to biggest. Show your working out using common numerators.

$$\frac{4}{3} \quad \frac{8}{5} \quad \frac{16}{11}$$

	<input type="text"/>	<input type="text"/>	<input type="text"/>	
smallest	<hr/>	<hr/>	<hr/>	biggest
	<input type="text"/>	<input type="text"/>	<input type="text"/>	

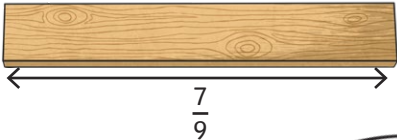


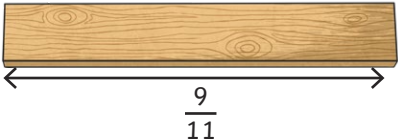
1) I am going to use common denominators to compare these fractions.

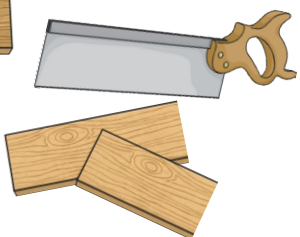
$$\frac{9}{13} \quad \square \quad \frac{3}{7}$$


Is this the best method to use? Explain your reasoning.

2) Captain Long Beard is sawing two pieces of wood for the ship's gang plank. He cuts both pieces of wood to the same length.

A  $\frac{7}{9}$

B  $\frac{9}{11}$



 I can use the numerator of the cut-off pieces of wood to easily compare which piece of wood was longer to start off with.

Do you agree? Explain the method and reasoning.



1) Can you put all the fractions into the grid so that every row and column is in ascending order?

smallest biggest











→

smallest ↓					










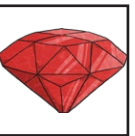


biggest
↓

$\frac{1}{36}$	$\frac{5}{36}$	$\frac{7}{36}$	$\frac{1}{3}$	$\frac{3}{4}$
$\frac{2}{9}$	$\frac{5}{12}$	$\frac{1}{6}$	$\frac{17}{36}$	$\frac{5}{6}$
$\frac{11}{12}$	$\frac{4}{9}$	$\frac{7}{12}$	$\frac{11}{18}$	$\frac{8}{9}$
$\frac{5}{18}$	$\frac{1}{9}$	$\frac{2}{3}$	$\frac{1}{2}$	$\frac{13}{36}$
$\frac{7}{18}$	$\frac{1}{12}$	$\frac{1}{4}$	$\frac{11}{36}$	$\frac{17}{18}$

Clue 1 Answers

									
2	4	8	6	1	10	5	9	3	7

Are these fractions comparison statements **true** or **false**?

<i>true</i>	<i>false</i>	<i>true</i>
 <hr style="width: 50%; margin: 0 auto;"/>  <hr style="width: 50%; margin: 0 auto;"/> $<$	 <hr style="width: 50%; margin: 0 auto;"/>  <hr style="width: 50%; margin: 0 auto;"/> $>$	 <hr style="width: 50%; margin: 0 auto;"/>  <hr style="width: 50%; margin: 0 auto;"/> $<$
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If there are more true statements, then the **first** digit you need to unlock the treasure chest is:

5

If there are more false statements, then the **first** digit you need to unlock the treasure chest is:

9

Clue 2 Answers

									
2	4	8	6	1	10	5	9	3	7

Use < or > to make these statements correct.



>



<



>













If there are more statements that use the less than symbol (<), then the **second** digit you need to unlock the treasure chest is:

8





































If there are more statements that use the greater than symbol (>), then the **second** digit you need to unlock the treasure chest is:

1

Clue 3 Answers







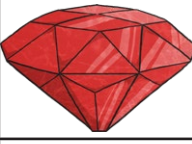



									
2	4	8	6	1	10	5	9	3	7

Which of these sets of fractions is in the correct order from biggest to smallest?

The number next to the correctly ordered set of fractions is the third digit of the number you need to unlock the treasure chest.

Clue 4 Answers

									
2	4	8	6	1	10	5	9	3	7

Circle the largest fraction in each of these groups.

Group 1: $\frac{\text{Pirate hat}}{\text{Anchor}}$ vs $\frac{\text{Pirate hat}}{\text{Pirate hat}}$ vs $\frac{\text{Red diamond}}{\text{Palm trees}}$ (circled)











Group 2: $\frac{\text{Sailboat}}{\text{Red diamond}}$ vs $\frac{\text{Parrot}}{\text{Gold coin}}$ (circled) vs $\frac{\text{Anchor}}{\text{Compass}}$

Group 3: $\frac{\text{Pirate hat}}{\text{Anchor}}$ vs $\frac{\text{Anchor}}{\text{Red diamond}}$ (circled) vs $\frac{\text{Sailboat}}{\text{Pirate flag}}$

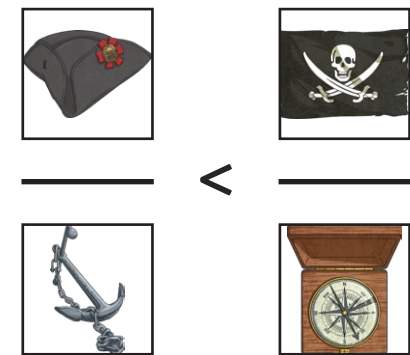
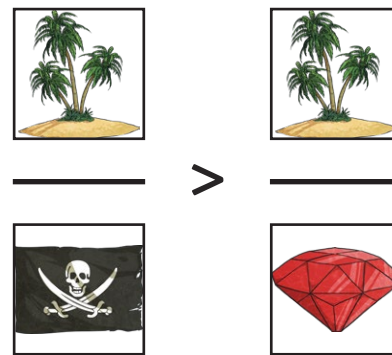
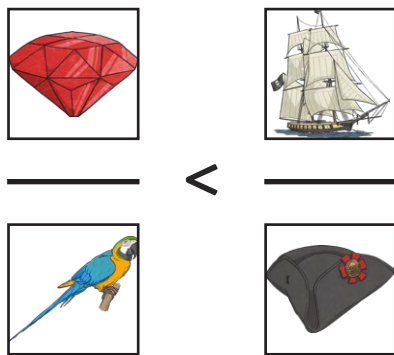
6

The denominator of the largest of your circled fractions is the **fourth** digit of the number you need to unlock the treasure chest.

Clue 1

									
2	4	8	6	1	10	5	9	3	7

Are these fractions comparison statements **true** or **false**?













If there are more true statements, then the **first** digit you need to unlock the treasure chest is:

5





If there are more false statements, then the **first** digit you need to unlock the treasure chest is:





9





Clue 2

									
2	4	8	6	1	10	5	9	3	7

Use < or > to make these statements correct.

		
_____	<input type="text"/>	_____
		

		
_____	<input type="text"/>	_____
		

		
_____	<input type="text"/>	_____
		











If there are more statements that use the less than symbol (<), then the **second** digit you need to unlock the treasure chest is:

8

































If there are more statements that use the greater than symbol (>), then the **second** digit you need to unlock the treasure chest is:

1

Clue 3







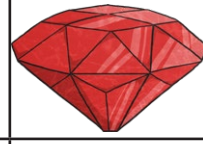



									
2	4	8	6	1	10	5	9	3	7

Which of these sets of fractions is in the correct order from biggest to smallest?

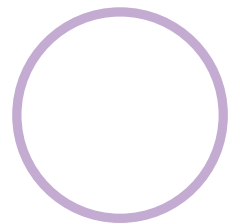
				2					9
									
				3					4
									

The number next to the correctly ordered set of fractions is the third digit of the number you need to unlock the treasure chest.

Clue 4

									
2	4	8	6	1	10	5	9	3	7

Circle the largest fraction in each of these groups.



The denominator of the largest of your circled fractions is the **fourth** digit of the number you need to unlock the treasure chest.

Unlock the Pirate Treasure Chest Recording Sheet

Solve the clues to discover the code needed to unlock the treasure chest.

Write the digits on this answer sheet as you crack the clues.

1 st	2 nd	3 rd	4 th

Once you have discovered the number for the padlock, check it with your teacher to see if you can unlock the treasure chest!

Challenge

Can you write a new clue for the final digit?



- 1) Compare these fractions using the < and > symbols. Show your working out using common numerators.



$$\frac{5}{8} \square \frac{10}{13}$$

$$\frac{14}{23} \square \frac{7}{15}$$

$$1\frac{3}{4} \square 1\frac{6}{7}$$

$$1\frac{12}{23} \square 1\frac{4}{7}$$

- 2) Put these fractions in order from smallest to biggest. Show your working out using common numerators.

$$\frac{4}{3} \quad \frac{8}{5} \quad \frac{16}{11}$$

- 1) Compare these fractions using the < and > symbols. Show your working out using common numerators.



$$\frac{5}{8} \square \frac{10}{13}$$

$$\frac{14}{23} \square \frac{7}{15}$$

$$1\frac{3}{4} \square 1\frac{6}{7}$$

$$1\frac{12}{23} \square 1\frac{4}{7}$$

- 2) Put these fractions in order from smallest to biggest. Show your working out using common numerators.

$$\frac{4}{3} \quad \frac{8}{5} \quad \frac{16}{11}$$

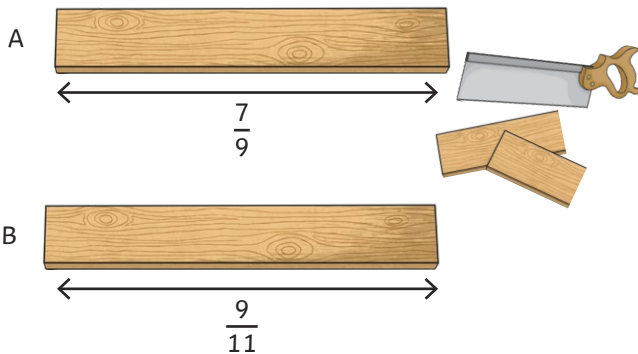
- 1) I am going to use common denominators to compare these fractions.



$$\frac{9}{13} \square \frac{3}{7}$$

Is this the best method to use? Explain your reasoning.

- 2) Captain Long Beard is sawing two pieces of wood for the ship's gang plank. He cuts both pieces of wood to the same length.



I can use the numerator of the cut-off pieces of wood to easily compare which piece of wood was longer to start off with.

Do you agree? Explain the method and reasoning.

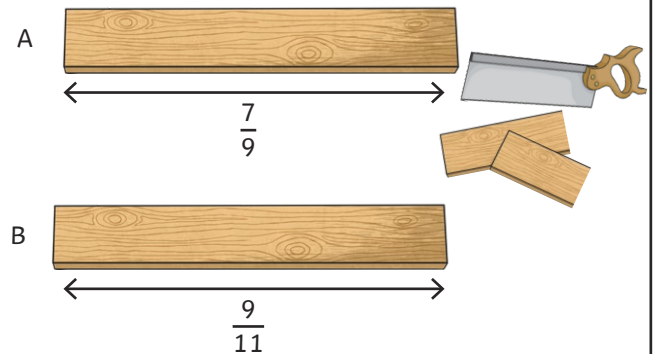
- 1) I am going to use common denominators to compare these fractions.



$$\frac{9}{13} \square \frac{3}{7}$$

Is this the best method to use? Explain your reasoning.

- 2) Captain Long Beard is sawing two pieces of wood for the ship's gang plank. He cuts both pieces of wood to the same length.



I can use the numerator of the cut-off pieces of wood to easily compare which piece of wood was longer to start off with.

Do you agree? Explain the method and reasoning.

1) Can you put all the fractions into the grid so that every row and column is in ascending order?



smallest

biggest

smallest					
biggest					

$\frac{1}{36}$	$\frac{5}{36}$	$\frac{7}{36}$	$\frac{1}{3}$	$\frac{3}{4}$
$\frac{2}{9}$	$\frac{5}{12}$	$\frac{1}{6}$	$\frac{17}{36}$	$\frac{5}{6}$
$\frac{11}{12}$	$\frac{4}{9}$	$\frac{7}{12}$	$\frac{11}{18}$	$\frac{8}{9}$
$\frac{5}{18}$	$\frac{1}{9}$	$\frac{2}{3}$	$\frac{1}{2}$	$\frac{13}{36}$
$\frac{7}{18}$	$\frac{1}{12}$	$\frac{1}{4}$	$\frac{11}{36}$	$\frac{17}{18}$

1) Can you put all the fractions into the grid so that every row and column is in ascending order?



smallest

biggest

smallest					
biggest					

$\frac{1}{36}$	$\frac{5}{36}$	$\frac{7}{36}$	$\frac{1}{3}$	$\frac{3}{4}$
$\frac{2}{9}$	$\frac{5}{12}$	$\frac{1}{6}$	$\frac{17}{36}$	$\frac{5}{6}$
$\frac{11}{12}$	$\frac{4}{9}$	$\frac{7}{12}$	$\frac{11}{18}$	$\frac{8}{9}$
$\frac{5}{18}$	$\frac{1}{9}$	$\frac{2}{3}$	$\frac{1}{2}$	$\frac{13}{36}$
$\frac{7}{18}$	$\frac{1}{12}$	$\frac{1}{4}$	$\frac{11}{36}$	$\frac{17}{18}$