

# Fractions

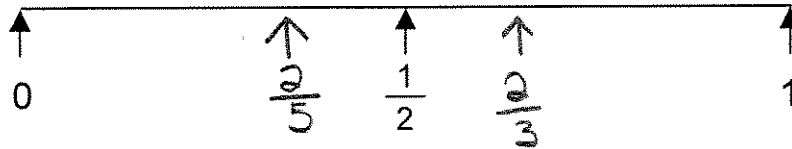
This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions

**T1**

$$\begin{array}{r} 20 \\ -15 \\ \hline 5 \end{array} \quad \begin{array}{r} 15 \\ -12 \\ \hline 3 \end{array}$$

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.
2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

I divided the line into  $\frac{3}{3}$ 's and where the second line was was where I put the  $\frac{2}{3}$ 's. Then I did the same for the  $\frac{2}{5}$ 's.

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?  $\frac{2}{5}$

Explain how you figured it out.

I found a denominator that 3, 5, and 2 could go into evenly and that number was 30.  $\frac{1}{2} = \frac{15}{30}$ ,  $\frac{2}{5} = \frac{12}{30}$ ,  $\frac{2}{3} = \frac{20}{30}$ . Then I did  $\frac{15}{30} - \frac{12}{30} = \frac{3}{30}$ , next I did  $\frac{20}{30} - \frac{15}{30} = \frac{5}{30}$ . The difference  $\frac{3}{30}$  is smaller than  $\frac{5}{30}$  and the smaller number means it is closer to  $\frac{1}{2}$  which =  $\frac{15}{30}$ .

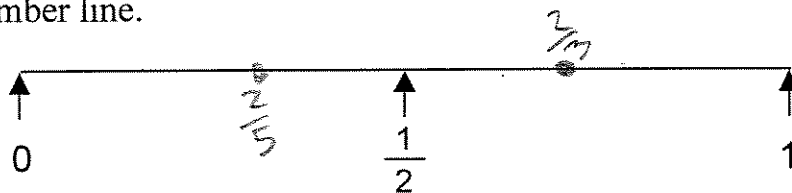
## Fractions

This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions

# T2

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.
2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

I used imaginary lines to split it in fifth than in thirds

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?  $\frac{2}{5}$

Explain how you figured it out.

After I put the fractions on the number line I measured the lengths from each fraction to  $\frac{1}{2}$ .

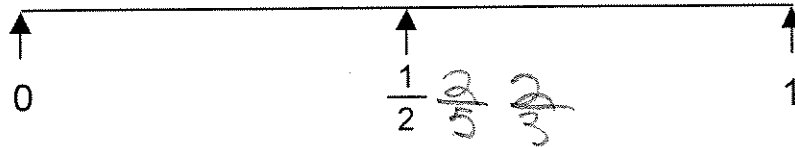
## Fractions

# T3




This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.
2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

Because  looks like more than  to me. And the both are bigger than 

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?  $\frac{2}{5}$

Explain how you figured it out.

Because if someone cut a pie into 5<sup>th</sup>'s and you took 2 pieces would be smaller than if you could take 2 pieces out of 3. And the smaller one would go next to  $\frac{1}{2}$  since  $\frac{1}{2}$  is smaller than both fractions.

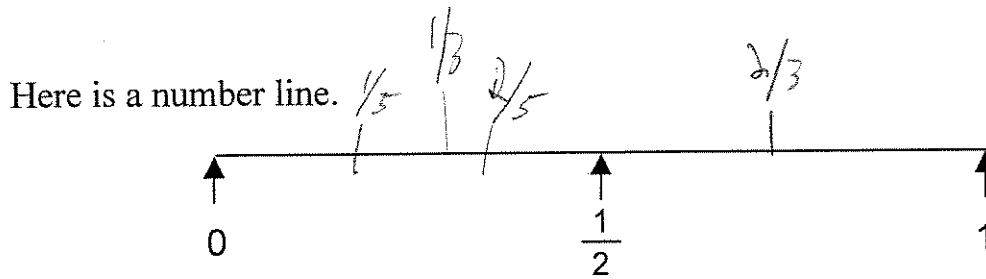
6

# Fractions

# T4

This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.
2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

I split the line in 3 parts and ~~5~~ <sup>five</sup> ~~5~~

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3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?  $\frac{2}{5}$

Explain how you figured it out.

I look at the line

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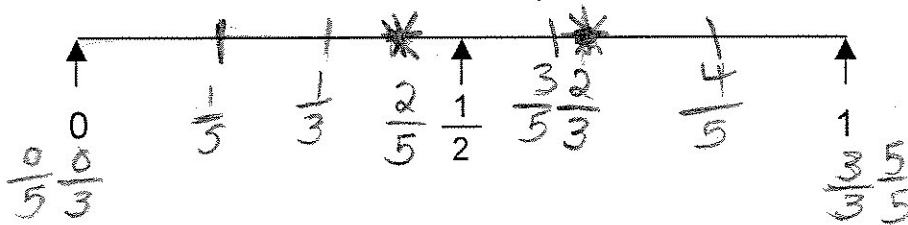
# Fractions

# T5

This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

for  $\frac{2}{3}$ : I split the number line into thirds and  
for  $\frac{2}{5}$ : I split the number line into fifths and  
marked where  $\frac{2}{5}$  was.

marked where  $\frac{2}{3}$  was.

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?  $\frac{2}{5}$

Explain how you figured it out.

I looked at my number line and thought  
that  $\frac{2}{3}$  was closer to  $\frac{3}{4}$  than to  $\frac{1}{2}$   
and I looked at  $\frac{2}{5}$  and found that it  
was indeed closest to  $\frac{1}{2}$ .

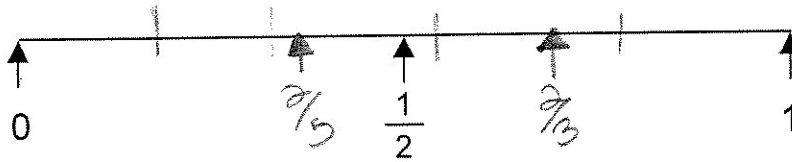
# Fractions

# S1

This problem gives you the chance to:

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- compare the sizes of fractions

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.
2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

I divided the line into 3<sup>rd</sup>'s first then took the  $\frac{2}{3}$ 's line and then I divided it into 5<sup>th</sup>'s and then took the  $\frac{2}{5}$ 's line mark.

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?  $\frac{2}{5}$

Explain how you figured it out.

I used the common denominator and then I took the one that was closer to half of the common denominator, 30.

$$\frac{2}{3} \quad \frac{2}{5} \quad \frac{20}{30}$$

$$\frac{18}{30}$$

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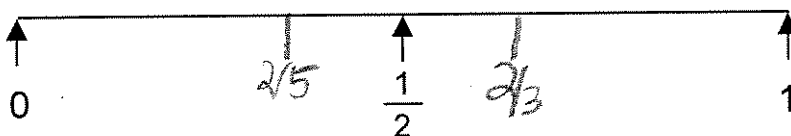
## Fractions

S2

This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.
2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

I knew that  $\frac{2}{3}$  is more than half and that  $\frac{2}{5}$  is less than half.

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?  $\frac{2}{3}$

Explain how you figured it out.

Because  $\frac{2}{3}$  is  $66\frac{2}{3}$  or something like that

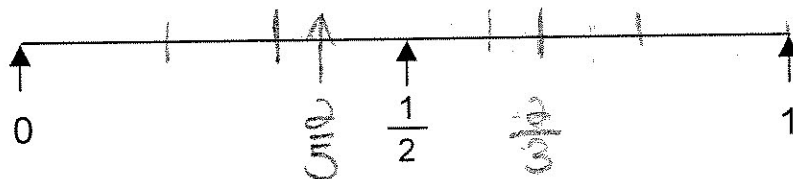
## Fractions

# S3

This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.
2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

I divided the line. I evened out both sides,  
then the last number split through the  
middle. It's sort of hard to explain.

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?  $\frac{2}{5}$  is nearer.

Explain how you figured it out.

I used common denominators, and which-  
ever top number is closer to half of  
the bottom number is closer to one half.

6



## Fractions

S4

This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.
2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

$\frac{2}{5}$  is less than half and  $\frac{2}{3}$  is more

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?  $\frac{2}{3}$

Explain how you figured it out.

I divided the line in thirds and fifths and then measured the lengths

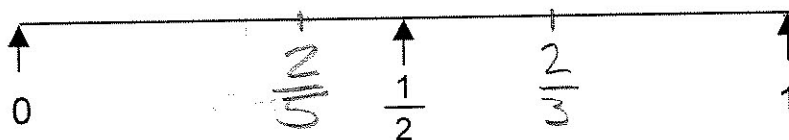
## Fractions

# S5

This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

I divided the number line into 3<sup>rd</sup>s first then I found the 2<sup>nd</sup> 3<sup>rd</sup> mark and marked that. Then I divided the line into 5<sup>th</sup>s then I marked the 2<sup>nd</sup> 5<sup>th</sup> marks.

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?  $\frac{2}{5}$

Explain how you figured it out.

I looked at the number line and it looked like the  $\frac{2}{5}$  mark was closer to  $\frac{1}{2}$ .

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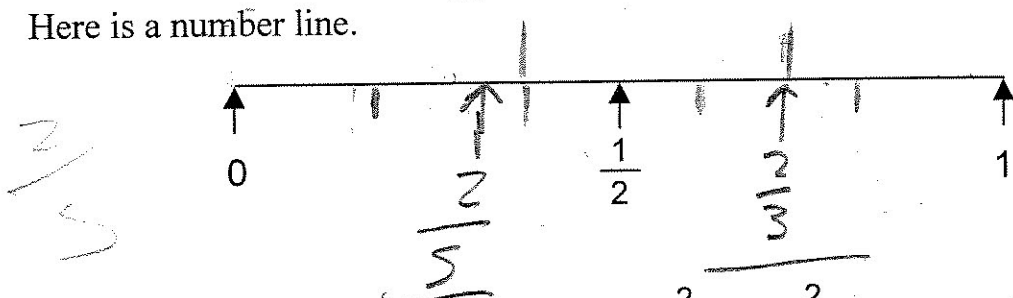
# Fractions

# S6

This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.
2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

For  $\frac{2}{3}$  I divided the # line into 3 parts  
and decided to put it on the 2nd line.  
For  $\frac{2}{5}$  I did the same except I divided it  
by 5.

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?  $\frac{2}{3}$

Explain how you figured it out.

I figured it out because I looked at the  
lines deviding by 3 and  $\frac{2}{3}$  was on it  
but  $\frac{2}{5}$  didn't quite reach a line.

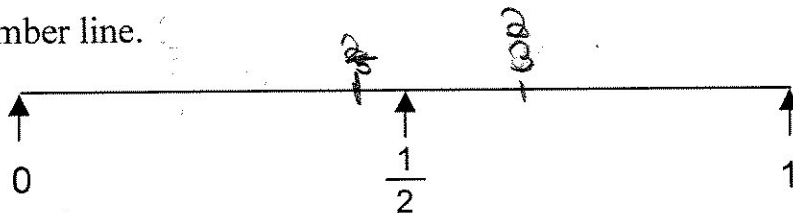
## Fractions

# S7

This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.
2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

I tried to pretend I was folding them into 5th and thirds then I marked them

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?  $\frac{2}{5}$

Explain how you figured it out.

I figured this because it is one tiny piece below half and  $\frac{2}{3}$  is a bigger piece above half.

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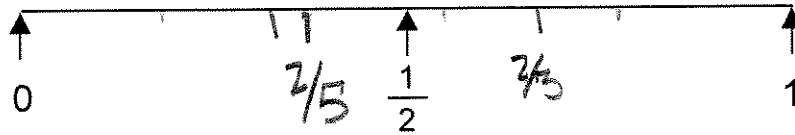
# Fractions

# S8

This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.
2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

I divided the line 1st into 3 parts. I marked at the end of  $\frac{2}{3}$ . I did the same with  $\frac{2}{5}$ . Except divided into 5 parts.

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?

Explain how you figured it out.



$\frac{2}{5}$  I drew one big rectangle and divided it into 3 horizontal parts. In each smaller rectangle I divided it into 3, 5, and 5 parts, I shade  $\frac{1}{2}$ ,  $\frac{2}{3}$  and  $\frac{2}{5}$ .  $\frac{2}{5}$  was closer to  $\frac{1}{2}$  than  $\frac{2}{3}$  was.

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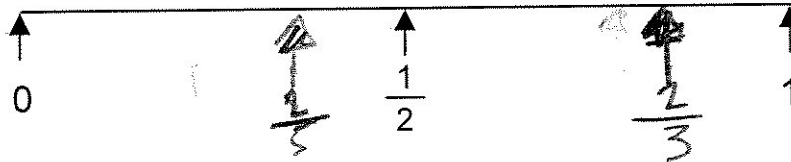
# Fractions

# S9

This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.
2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

Well  $\frac{2}{3}$  is almost a whole or past a half and so I put that near 1, and  $\frac{2}{5}$  is not a half so I put that right near  $\frac{1}{2}$ .

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ? They are an equal distance

Explain how you figured it out.

They are an equal distance because  $\frac{2}{5}$  that is half and  $\frac{1}{3}$  that is half, so they are an equal distance to one-half.

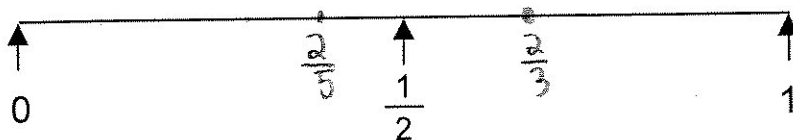
## Fractions

# S10

This problem gives you the chance to:

- show the position of fractions on a number line
- compare the sizes of fractions

Here is a number line.



1. Mark the position of the two fractions  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

2. Explain how you decided where to place  $\frac{2}{3}$  and  $\frac{2}{5}$  on the number line.

For  $\frac{2}{3}$  I divided the line in 3 and put  $\frac{2}{3}$  at the end of the second third. For  $\frac{2}{5}$  I divided  $0-\frac{1}{2}$  in fifths and put  $\frac{2}{5}$  at .4 since

3. Which of the two fractions,  $\frac{2}{3}$  or  $\frac{2}{5}$ , is nearer to  $\frac{1}{2}$ ?  $\frac{2}{5}$

Explain how you figured it out.

because if you convert the fractions into percents  $\frac{2}{5}$  is 40% and  $\frac{2}{3}$  is 66.6 percent. 40 is closer to 50 than 66 is.