

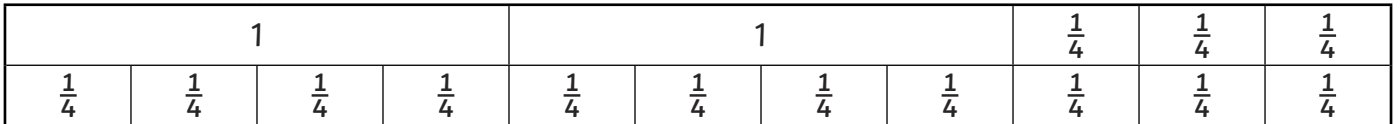
# Converting Fractions

To solve calculations converting between mixed numbers and improper fractions.

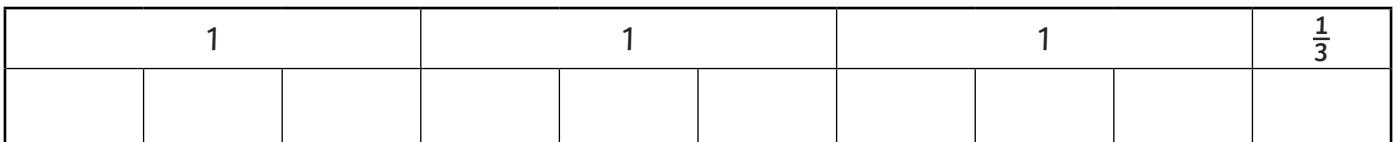


1) Express these mixed numbers as improper fractions. Use the bar models to help you work out the answers, filling them in where needed.

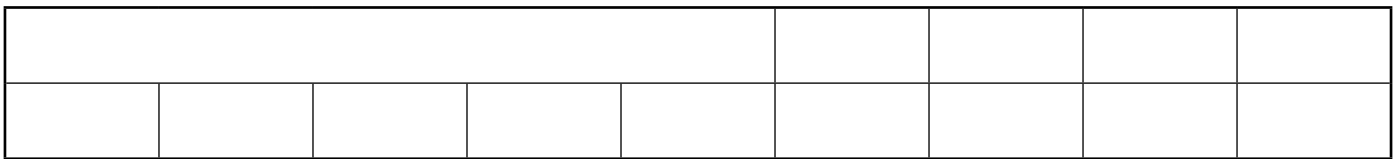
a)  $2 \frac{3}{4} =$  \_\_\_\_\_



b)  $3 \frac{1}{3} =$  \_\_\_\_\_

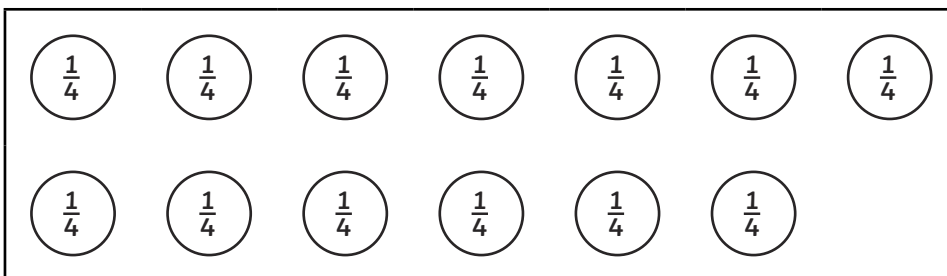


c)  $1 \frac{4}{5} =$  \_\_\_\_\_

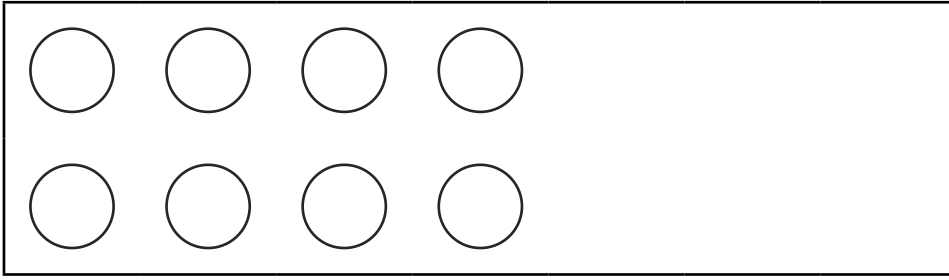


2) Express these improper fractions as mixed numbers. Use the counters to help you work out the answers, drawing and grouping them where needed.

a)  $\frac{13}{4} =$  \_\_\_\_\_



b)  $\frac{8}{5} =$  \_\_\_\_\_



c)  $\frac{8}{3} =$  \_\_\_\_\_



# Converting Fractions Answers

Question	Answer																						
1. Express these improper fractions as mixed numbers.																							
a	$2 \frac{3}{4} = \frac{11}{4}$ <table border="1" data-bbox="328 416 1495 533" style="width: 100%; text-align: center;"> <tr> <td colspan="4">1</td> <td colspan="4">1</td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> </tr> <tr> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> </tr> </table>	1				1				$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$
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b	$3 \frac{1}{3} = \frac{10}{3}$ <table border="1" data-bbox="328 633 1495 750" style="width: 100%; text-align: center;"> <tr> <td colspan="3">1</td> <td colspan="3">1</td> <td colspan="3">1</td> <td><math>\frac{1}{3}</math></td> </tr> <tr> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> </tr> </table>	1			1			1			$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$		
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c	$1 \frac{4}{5} = \frac{9}{5}$ <table border="1" data-bbox="328 851 1495 967" style="width: 100%; text-align: center;"> <tr> <td colspan="5">1</td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> </tr> <tr> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> </tr> </table>	1					$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$				
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2. Express these improper fractions as mixed numbers.																							
a	$\frac{13}{4} = 3 \frac{1}{4}$ <table border="1" data-bbox="328 1135 1074 1350" style="width: 100%; text-align: center;"> <tr> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> </tr> <tr> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> <td><math>\frac{1}{4}</math></td> </tr> </table>	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$	$\frac{1}{4}$								
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b	$\frac{8}{5} = 1 \frac{3}{5}$ <table border="1" data-bbox="328 1449 1074 1664" style="width: 100%; text-align: center;"> <tr> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> </tr> <tr> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> <td><math>\frac{1}{5}</math></td> </tr> </table>	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$	$\frac{1}{5}$														
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c	$\frac{8}{3} = 2 \frac{2}{3}$ <table border="1" data-bbox="328 1762 1074 1977" style="width: 100%; text-align: center;"> <tr> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> </tr> <tr> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> <td><math>\frac{1}{3}</math></td> </tr> </table>	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$	$\frac{1}{3}$														
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# Converting Fractions

To solve calculations converting between mixed numbers and improper fractions.



1) Express these mixed numbers as improper fractions.

a)  $1 \frac{3}{4} =$  \_\_\_\_\_

b)  $3 \frac{1}{3} =$  \_\_\_\_\_

c)  $2 \frac{4}{5} =$  \_\_\_\_\_

2) Express these improper fractions as mixed numbers.

a)  $\frac{11}{4} =$  \_\_\_\_\_

b)  $\frac{9}{5} =$  \_\_\_\_\_

c)  $\frac{10}{3} =$  \_\_\_\_\_

3) Will baked 8 fairy cakes. Each cake weighed  $\frac{1}{5}$  kg. How much did the cakes weigh overall?  
Express your answer as a mixed number.

\_\_\_\_\_

4) Katie needs  $4 \frac{1}{2}$  litres of paint to paint her bedroom. Each can of paint holds  $\frac{1}{2}$  l.  
How many cans of paint does she need?

\_\_\_\_\_



# Converting Fractions Answers

Question	Answer
<b>1. Express these mixed numbers as improper fractions.</b>	
a	$1 \frac{3}{4} = \frac{7}{4}$
b	$3 \frac{1}{3} = \frac{10}{3}$
c	$2 \frac{4}{5} = \frac{14}{5}$
<b>2. Express these improper fractions as mixed numbers.</b>	
a	$\frac{11}{4} = 2 \frac{3}{4}$
b	$\frac{9}{5} = 1 \frac{4}{5}$
c	$\frac{10}{3} = 3 \frac{1}{3}$
<b>3. Will baked 8 fairy cakes. Each cake weighed <math>\frac{1}{5}</math> kg. How much did the cakes weigh overall? Express your answer as a mixed number.</b>	
	<b>The cakes weighed <math>1 \frac{3}{5}</math> kg overall.</b>
<b>4. Katie needs <math>4 \frac{1}{2}</math> litres of paint to paint her bedroom. Each can of paint holds <math>\frac{1}{2}</math> l. How many cans of paint does she need?</b>	
	<b>Katie needs 9 cans of paint.</b>

# Converting Fractions

To solve calculations converting between mixed numbers and improper fractions.



1) Express these mixed numbers as improper fractions.

a)  $2 \frac{3}{4} =$  \_\_\_\_\_

b)  $4 \frac{1}{3} =$  \_\_\_\_\_

2) Express these improper fractions as mixed numbers.

a)  $\frac{19}{4} =$  \_\_\_\_\_

b)  $\frac{7}{6} =$  \_\_\_\_\_

3) Aisha wrapped some presents that weighed  $5 \frac{2}{3}$  kg altogether. Each present weighed  $\frac{1}{3}$  kg. How many presents did Aisha wrap?

\_\_\_\_\_

4) Sam ran 11 laps around the school playground. Each lap was half a mile long. How far did he run in total? Express your answer as a mixed number.

\_\_\_\_\_

5) Express  $3 \frac{2}{5}$  as an improper fraction.



I think I could use multiplication to solve this.

Joseph

What do you think? Do you agree or disagree with Joseph? Explain why.

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# Converting Fractions Answers

Question	Answer
<b>1. Express these mixed numbers as improper fractions.</b>	
a	$2 \frac{3}{4} = \frac{11}{4}$
b	$4 \frac{1}{3} = \frac{13}{3}$
<b>2. Express these improper fractions as mixed numbers.</b>	
a	$\frac{19}{4} = 4 \frac{3}{4}$
b	$\frac{7}{6} = 1 \frac{1}{6}$
<b>3. Aisha wrapped some presents that weighed <math>5 \frac{2}{3}</math> kg altogether. Each present weighed <math>\frac{1}{3}</math> kg. How many presents did Aisha wrap?</b>	
	<b>Aisha wrapped 17 presents.</b>
<b>4. Sam ran 11 laps around the school playground. Each lap was half a mile long. How far did he run in total? Express your answer as a mixed number.</b>	
	<b>Sam ran <math>5 \frac{1}{2}</math> laps in total.</b>
<b>5. Express <math>3 \frac{2}{5}</math> as an improper fraction. 'I think I could use multiplication to solve this.' What do you think? Do you agree or disagree with Joseph? Explain why.</b>	
	<b>This question is included to encourage children to make the link to multiplication, ready to look at this topic again in year 5. Look for understanding that '3 groups of 5' is <math>3 \times 5</math>.</b>