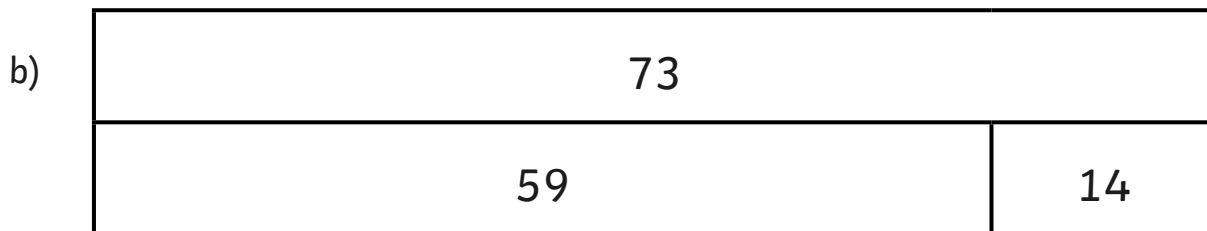
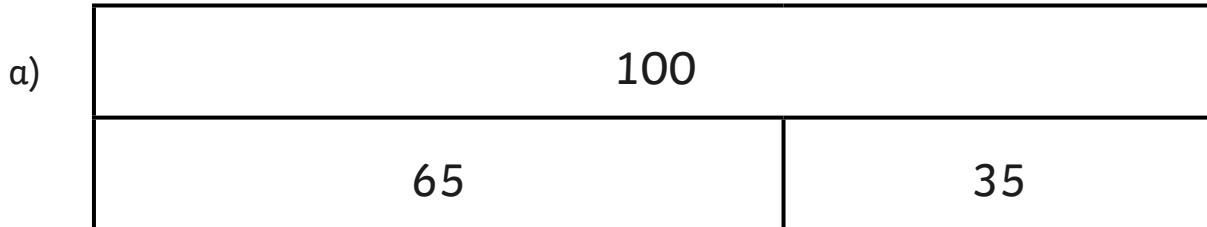


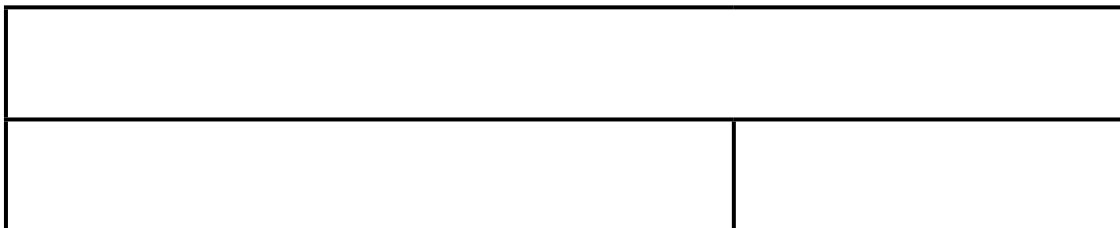
Using Bar Models in Addition and Subtraction

1. Can you write an addition and a subtraction calculation for each bar using the given numbers?

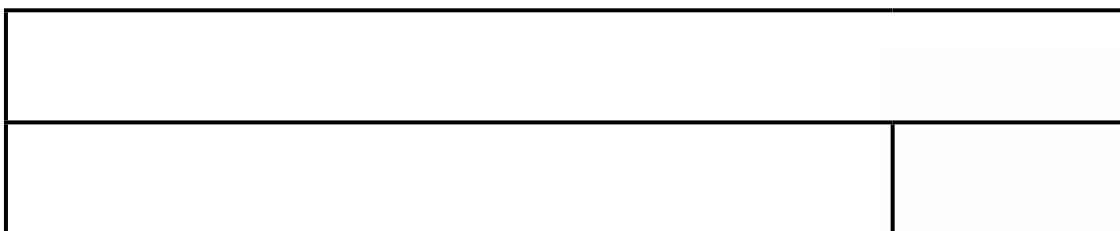


2. Can you complete the addition or subtraction calculation for each bar using the given numbers?

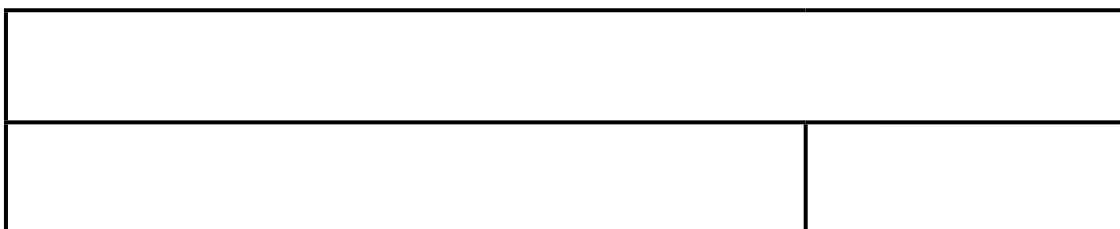
a) $48 + 33 = \underline{\quad}$



b) $97 - 28 = \underline{\quad}$



c) $88 - \underline{\quad} = 21$



3. Now, complete the bar model below to help you to solve the problems.

- a) Sally has 57 football cards in her collection folder. The whole folder holds 100 football cards in total. How many more football cards does Sally need to complete her collection?

- b) The fish and chip shop had 38 haddocks in their freezer. The shopkeeper ordered another 55 haddocks from the wholesaler. How many haddocks do they now have in total?

Challenge

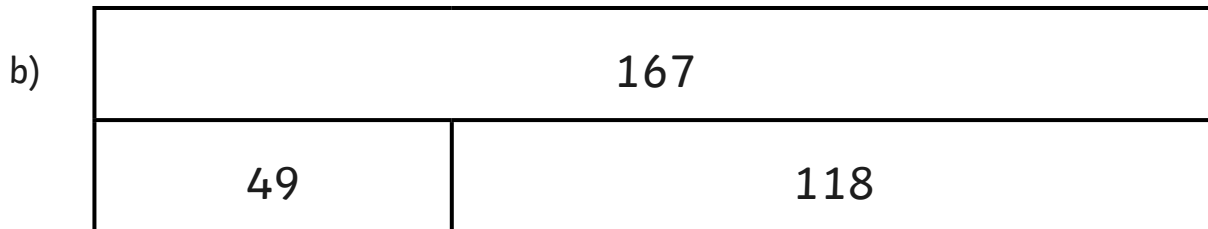
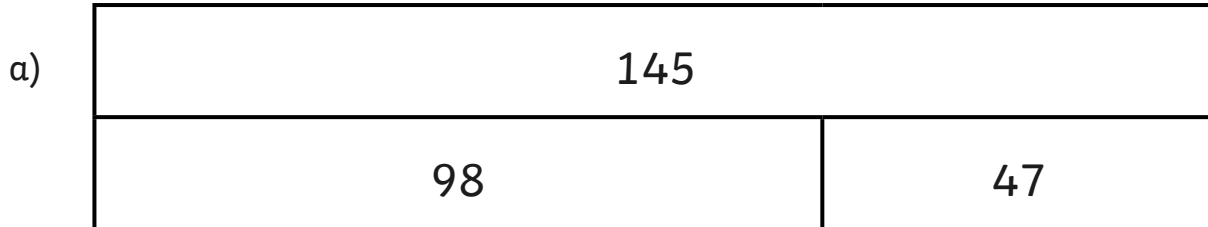
Now it's your turn... can you draw your own bar to solve this problem? Lenny had saved up £75. He spent £37 on a new football shirt. How much money did he have left?

Using Bar Models in Addition and Subtraction - Answers

question	answer	question	answer								
1.		3.									
a	Two calculations from: $65 + 35 = 100$ $35 + 65 = 100$ $100 - 65 = 35$ $100 - 35 = 65$	a	100 cards to fill folder <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="2" style="text-align: center;">100</td> </tr> <tr> <td style="text-align: center;">57</td> <td style="text-align: center;">43</td> </tr> </table> <p style="text-align: center;">Sally's cards cards needed</p>	100		57	43				
100											
57	43										
b	Two calculations from: $59 + 14 = 73$ $14 + 59 = 73$ $73 - 59 = 14$ $73 - 14 = 59$	b	93 total number of haddocks <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="2" style="text-align: center;">93</td> </tr> <tr> <td style="text-align: center;">38</td> <td style="text-align: center;">55</td> </tr> </table> <p style="text-align: center;">haddocks in freezer haddocks</p>	93		38	55				
93											
38	55										
2.		Challenge									
a	$48 + 33 = 81$ <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="2" style="text-align: center;">81</td> </tr> <tr> <td style="text-align: center;">48</td> <td style="text-align: center;">33</td> </tr> </table>	81		48	33	<p style="text-align: center;">£75 Lenny's savings</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="2" style="text-align: center;">£75</td> </tr> <tr> <td style="text-align: center;">£37</td> <td style="text-align: center;">£38</td> </tr> </table>		£75		£37	£38
81											
48	33										
£75											
£37	£38										
b	$97 - 28 = 69$ <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="2" style="text-align: center;">97</td> </tr> <tr> <td style="text-align: center;">69</td> <td style="text-align: center;">28</td> </tr> </table>	97		69	28						
97											
69	28										
c	$88 - 67 = 21$ <table border="1" style="margin-left: auto; margin-right: auto;"> <tr> <td colspan="2" style="text-align: center;">88</td> </tr> <tr> <td style="text-align: center;">67</td> <td style="text-align: center;">21</td> </tr> </table>	88		67	21						
88											
67	21										

Using Bar Models in Addition and Subtraction

1. Can you write an addition and a subtraction calculation for each bar using the given numbers?

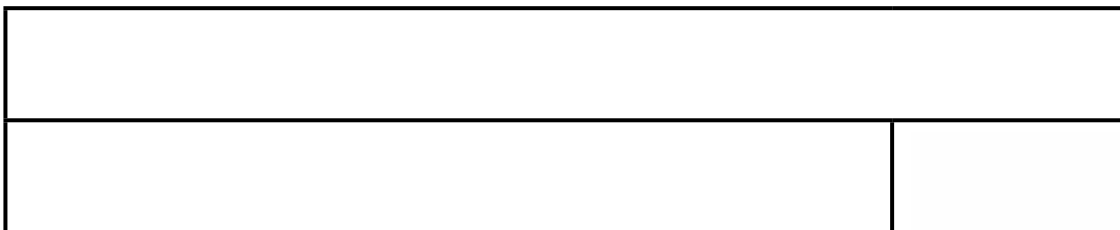


2. Can you complete the addition or subtraction calculation for each bar using the given numbers?

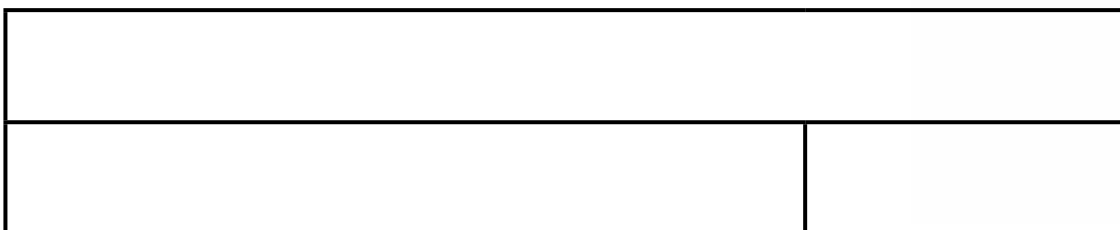
a) $127 + 56 = \underline{\quad}$



b) $182 - 47 = \underline{\quad}$



c) $200 - \underline{\quad} = 76$



3. Now, complete the bar model below to help you to solve the problems. You will need to draw a line to split the bar model up into the correctly sized pieces.

- a) Sally has 86 football cards in her collection folder. The whole folder holds 155 football cards in total. How many more football cards does Sally need to complete her collection?

- b) The fish and chip shop had 58 haddocks in their freezer. The shopkeeper ordered another 125 haddocks from the wholesaler. How many haddocks do they now have in total?

Challenge

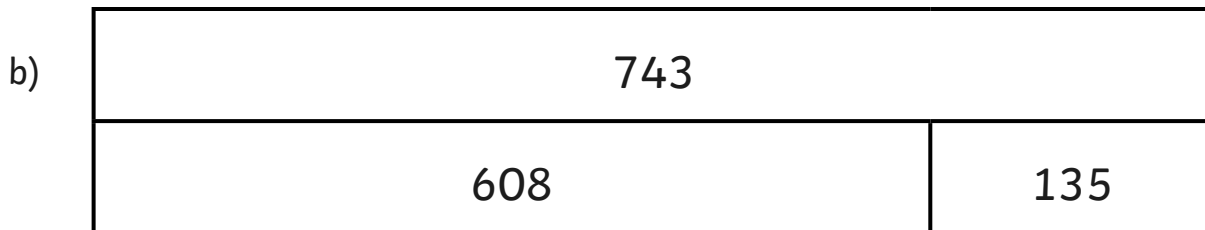
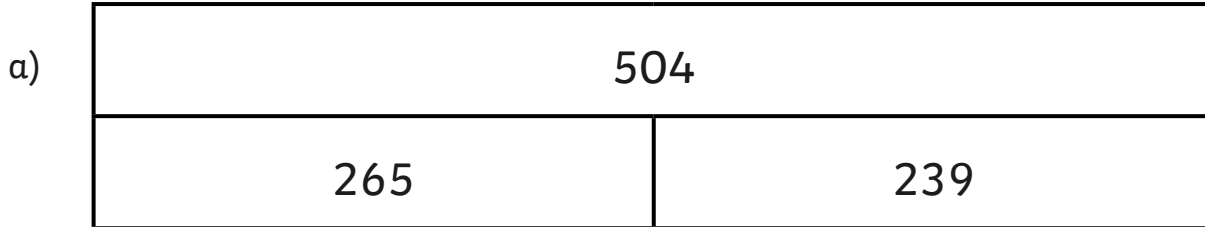
Now it's your turn...can you invent a word problem that involves the numbers 165, 87 and 78? Can you draw and label a bar model to help you **show** the maths in your chosen calculation?

Using Bar Models in Addition and Subtraction - Answers

question	answer	question	answer				
1.		3.					
a	Two calculations from: $98 + 47 = 145$ $47 + 98 = 145$ $145 - 47 = 98$ $145 - 98 = 47$	a	155 cards to fill folder <table border="1" style="margin: 10px auto;"> <tr> <td colspan="2" style="text-align: center;">155</td> </tr> <tr> <td style="text-align: center;">86</td> <td style="text-align: center;">69</td> </tr> </table> <p style="text-align: center;">Sally's cards cards needed</p>	155		86	69
155							
86	69						
b	Two calculations from: $49 + 118 = 167$ $118 + 49 = 167$ $167 - 49 = 118$ $167 - 118 = 49$	b	183 total number of haddocks <table border="1" style="margin: 10px auto;"> <tr> <td colspan="2" style="text-align: center;">183</td> </tr> <tr> <td style="text-align: center;">38</td> <td style="text-align: center;">125</td> </tr> </table> <p style="text-align: center;">haddocks in freezer haddocks</p>	183		38	125
183							
38	125						
2.		Challenge					
a	$127 + 56 = 183$ <table border="1" style="margin: 10px auto;"> <tr> <td colspan="2" style="text-align: center;">183</td> </tr> <tr> <td style="text-align: center;">127</td> <td style="text-align: center;">56</td> </tr> </table>	183		127	56	Any word problem and bar model relating to; $87 + 78 = 165$ $78 + 87 = 165$ $165 - 78 = 87$ $165 - 87 = 78$	
183							
127	56						
b	$182 - 47 = 135$ <table border="1" style="margin: 10px auto;"> <tr> <td colspan="2" style="text-align: center;">182</td> </tr> <tr> <td style="text-align: center;">135</td> <td style="text-align: center;">47</td> </tr> </table>	182		135	47		
182							
135	47						
c	$200 - 124 = 76$ <table border="1" style="margin: 10px auto;"> <tr> <td colspan="2" style="text-align: center;">200</td> </tr> <tr> <td style="text-align: center;">124</td> <td style="text-align: center;">76</td> </tr> </table>	200		124	76		
200							
124	76						

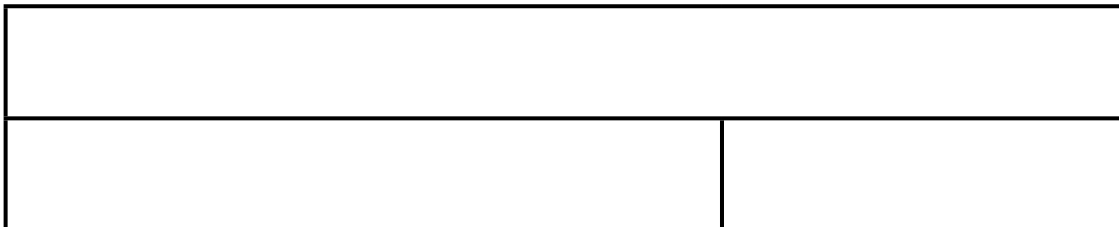
Using Bar Models in Addition and Subtraction

1. Can you write an addition and a subtraction calculation for each bar using the given numbers?

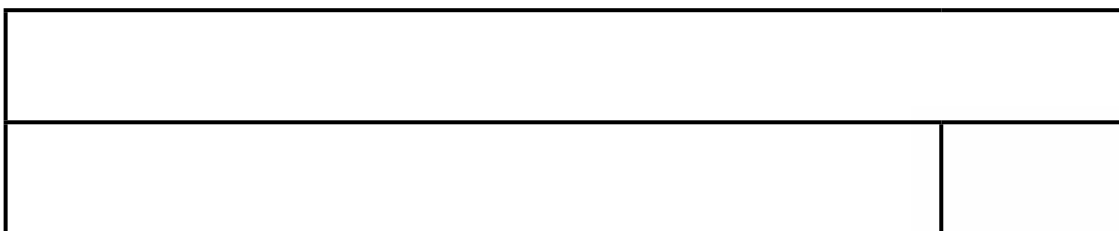


2. Can you write an addition and a subtraction calculation for each bar using the given numbers?

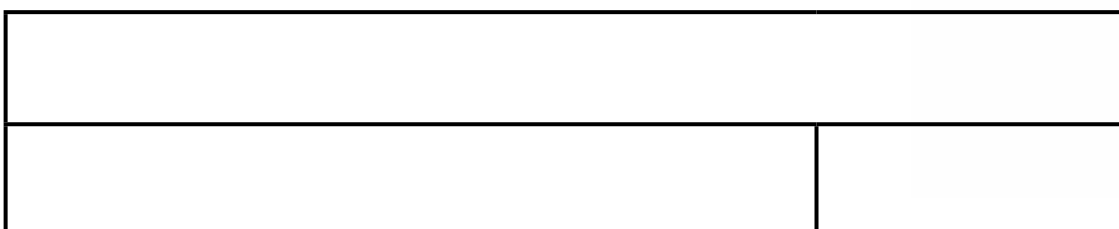
a) $589 + 307 = \underline{\hspace{2cm}}$



b) $678 - 546 = \underline{\hspace{2cm}}$



c) $908 - \underline{\hspace{2cm}} = 321$



3. Now, draw a bar model in the space below the question to help you to solve the problems below.

a) Sally has 457 football cards in her collection folder. The whole folder holds 650 football cards in total. How many more football cards does Sally need to complete her collection?

b) The fish and chip shop had 372 haddocks in their freezer. The shopkeeper ordered another 565 haddocks from the wholesaler. How many haddocks do they now have in total?

Challenge

Now it's your turn...can you invent a word problem that involves the numbers 765, 587 and 178? Can you draw and label a bar model to help you **show** the maths in your chosen calculation?

Using Bar Models in Addition and Subtraction - Answers

question	answer	question	answer				
1.		3.					
a	Two calculations from: $265 + 239 = 504$ $239 + 265 = 504$ $504 - 265 = 239$ $504 - 239 = 265$	a	650 cards to fill folder <table border="1" style="margin: 10px auto;"> <tr> <td colspan="2" style="text-align: center;">650</td> </tr> <tr> <td style="text-align: center;">457</td> <td style="text-align: center;">193</td> </tr> </table> <p style="text-align: center;">Sally's cards cards needed</p>	650		457	193
650							
457	193						
b	Two calculations from: $608 + 135 = 743$ $135 + 608 = 743$ $743 - 135 = 608$ $743 - 608 = 135$	b	183 total number of haddocks <table border="1" style="margin: 10px auto;"> <tr> <td colspan="2" style="text-align: center;">937</td> </tr> <tr> <td style="text-align: center;">372</td> <td style="text-align: center;">565</td> </tr> </table> <p style="text-align: center;">haddocks in freezer haddocks</p>	937		372	565
937							
372	565						
2.		Challenge					
a	$589 + 307 = 896$ <table border="1" style="margin: 10px auto;"> <tr> <td colspan="2" style="text-align: center;">896</td> </tr> <tr> <td style="text-align: center;">589</td> <td style="text-align: center;">307</td> </tr> </table>	896		589	307	Any word problem and bar model relating to: $587 + 178 = 765$ $178 + 587 = 765$ $765 - 178 = 587$ $765 - 587 = 178$	
896							
589	307						
b	$678 - 546 = 132$ <table border="1" style="margin: 10px auto;"> <tr> <td colspan="2" style="text-align: center;">678</td> </tr> <tr> <td style="text-align: center;">546</td> <td style="text-align: center;">132</td> </tr> </table>	678		546	132		
678							
546	132						
c	$908 - 587 = 321$ <table border="1" style="margin: 10px auto;"> <tr> <td colspan="2" style="text-align: center;">908</td> </tr> <tr> <td style="text-align: center;">587</td> <td style="text-align: center;">321</td> </tr> </table>	908		587	321		
908							
587	321						