I can convert between miles and kilometres.

Here is a distance chart between different towns. The measurements given are in miles. They may not be geographically accurate.

	Birmingham	Worcester	Nottingham	Oxford	Leicester
Birmingham	-	30	50	75	45
Worcester	30	-	80	85	75
Nottingham	50	80	-	100	30
Oxford	75	85	100	-	80
Leicester	45	75	30	80	-

Use the conversion: 5 miles  $\approx$  8 kilometres to calculate the distances between these towns.

Towns	Distance in Kilometres
a) Birmingham and Worcester	
b) Leicester and Oxford	
c) Nottingham and Oxford	
d) Oxford and Worcester	
e) Birmingham and Nottingham	

### Distances between Towns **Answers**

Towns	Distance in Kilometres
a) Birmingham and Worcester	48km
b) Leicester and Oxford	128km
c) Nottingham and Oxford	160km
d) Oxford and Worcester	136km
e) Birmingham and Nottingham	80km

### **Distances between Towns**

I can convert between miles and kilometres.

Here is a distance chart between different towns. The measurements given are in miles. They may not be geographically accurate.

	Coventry	Gloucester	Manchester	Chester	Liverpool
Coventry	-	68	105	115	118
Gloucester	68	-	135	143	146
Manchester	105	135	-	40	34
Chester	115	143	40	-	21
Liverpool	118	146	34	21	-

1. Use the conversion: 5 miles  $\approx$  8 kilometres to calculate the distances between these towns.

Towns	Distance in Kilometres
a) Coventry and Gloucester	
b) Manchester and Coventry	
c) Chester and Manchester	
d) Liverpool and Gloucester	
e) Liverpool and Chester	

2. It is more than 100km further from Gloucester to Liverpool than it is from Gloucester to Coventry. True or false? Show how you know.

## Distances between Towns **Answers**

Question	Answer	
1.		
a	108.8km	
b	168km	
с	64km	
d	233.6km	
е	33.6km	
2. It is more than 100km further from Gloucester to Liverpool than it is from Gloucester to		
Coventry. True or false? Show how you know.		
Irue. Gloucester to Liverpool = 233.6km Gloucester to Coventry = 108.8km 233.6km - 108.8km = 124.8km		



#### **Distances between Towns**

I can convert between miles and kilometres.

Here is a distance chart between different towns. The measurements given are in miles. They may not be geographically accurate.

	Manchester	Leeds	York	Wolverhampton	Durham
Manchester	-	45	72	75	129
Leeds	45	-	24	117	82
York	72	24	-	130	73
Wolverhampton	75	117	130	-	188
Durham	129	82	73	188	-

1. Use the conversion: 5 miles  $\approx$  8 kilometres to calculate the distances between these towns.

Towns	Distance in Kilometres
a) Manchester and Leeds	
b) Leeds and Wolverhampton	
c) York and Manchester	
d) Wolverhampton and York	
e) Durham and Leeds	

2. Ted is driving from Wolverhampton to Durham. He needs to go via Manchester. How much longer is the journey than if he went directly to Durham? Write your answer in kilometres and show how you worked out the answer.

# Distances between Towns **Answers**

Question	Answer	
1.		
α	72km	
b	187.2km	
с	115.2km	
d	208km	
е	131.2km	
<b>2</b> . Ted is driving from Wolverhampton to Durham. He needs to go via Manchester. How much longer is the journey than if he went directly to Durham? Write your answer in kilometres and show how you worked out the answer.		
From Wolverha	mpton to Manchester: 75 miles ≈ 120km	
From Manches	ter to Durham: 129 miles ≈ 206.4km	
Total journey: I	20km + 206.4km = 326.4km	
From Wolverhampton to Durham: 188 miles ≈ 300.8km		
Difference in the 2 journeys: 326.4km – 300.8km = 25.6km		
Answer could also show the calculations completed in miles first, then converted to kilometres:		
From Wolverhampton to Manchester: 75 miles		
From Manchester to Durham: 129 miles		
Total journey: 75 miles + 129 miles = 204 miles ≈ 326.4km		
Difference in the 2 journeys: 326.4km – 300.8km = 25.6km		