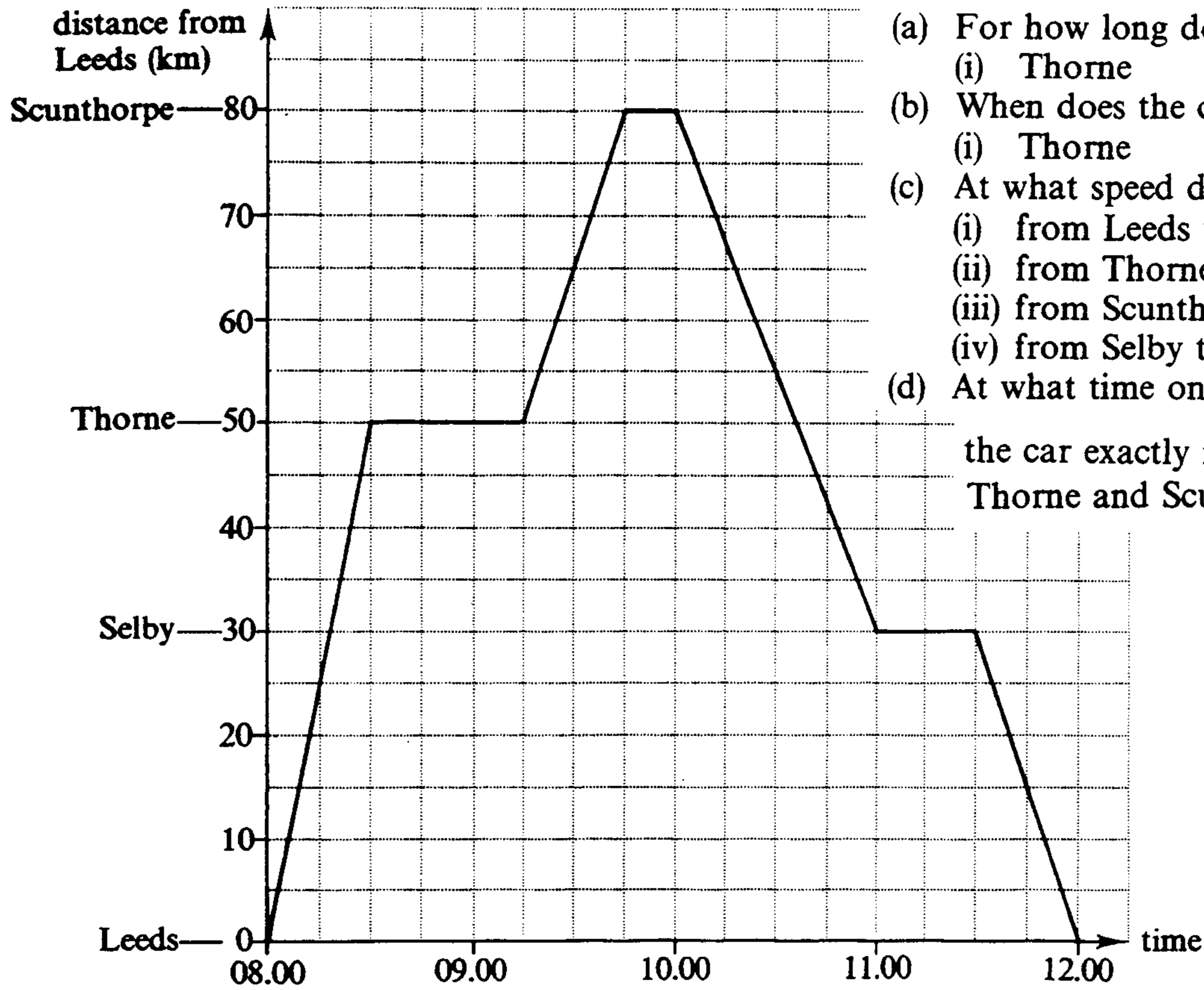


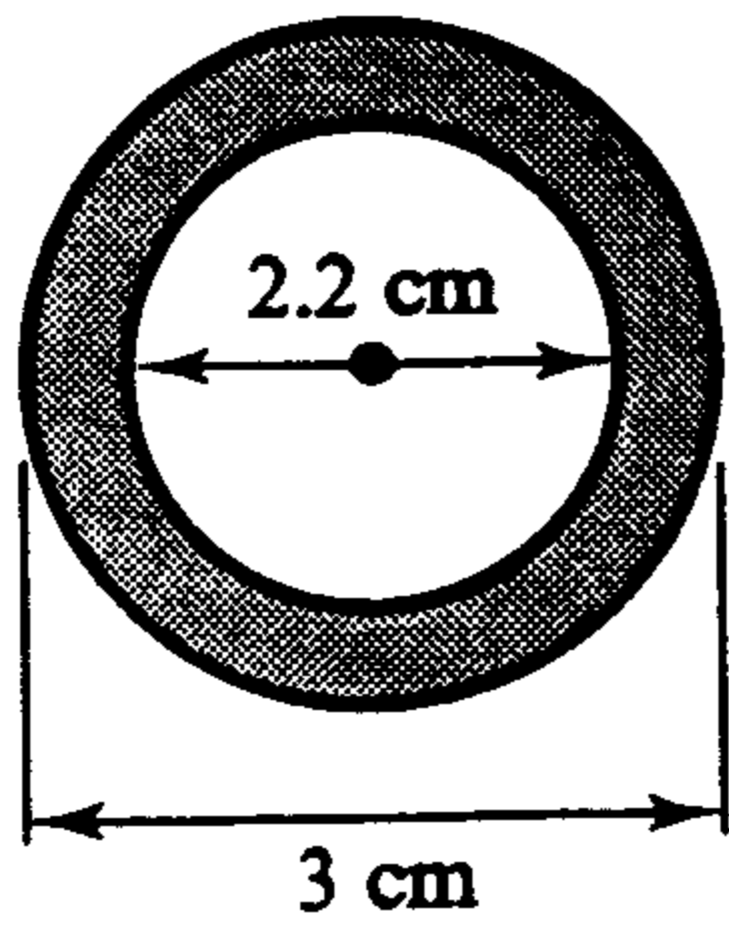


1. This graph shows a car journey from Leeds to Scunthorpe and back again.

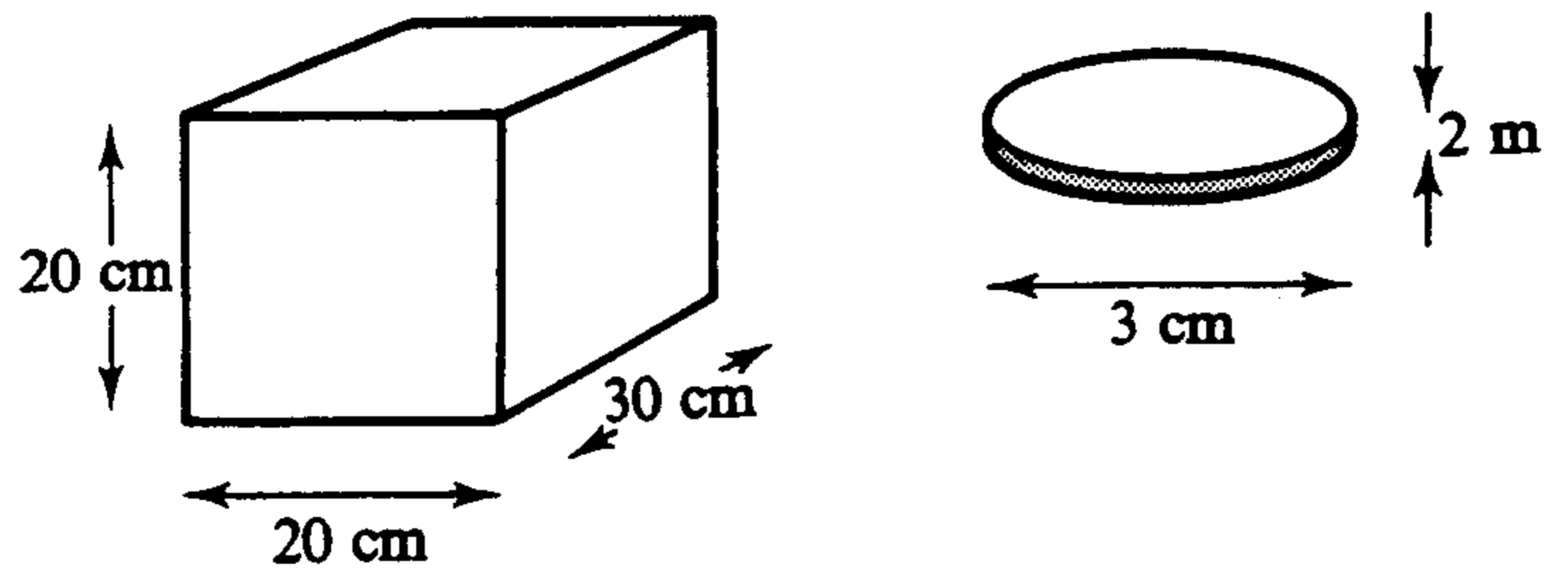


- (a) For how long does the car stop at
 - (i) Thorne
 - (ii) Scunthorpe
- (b) When does the car leave
 - (i) Thorne
 - (ii) Scunthorpe?
- (c) At what speed does the car travel
 - (i) from Leeds to Thorne
 - (ii) from Thorne to Scunthorpe
 - (iii) from Scunthorpe to Selby
 - (iv) from Selby to Leeds?
- (d) At what time on the outward journey is the car exactly mid-way between Thorne and Scunthorpe?

2. The cross-section of a metal pipe is shown below. Calculate the volume of metal used to make a pipe of length 10 m.



3. The rectangular block of silver shown below is melted down and made into coins with the dimensions shown. How many coins can be made?



4. Copy and complete the table for $y = 2x^2 + x - 3$.
[Remember that $2x^2 = 2(x^2)$]

x	-3	-2	-1	0	1	2	3
$2x^2$	18						
x	-3						
-3	-3	-3	-3				
y	12						

Draw the graph of $y = 2x^2 + x - 3$, using axes with x from -3 to +3 and y from -4 to +18.

5. Copy and complete the table for $y = 2x^2 - 3x - 5$.

x	-2	-1	0	1	2	3	4
$2x^2$							
-3x	6	3	0	-3			
-5	-5	-5	-5				
y							

Draw the graph of $y = 2x^2 - 3x - 5$, using axes with x from -2 to +4 and y from -7 to +15.