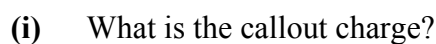


100 marks

Question 9

(a) Áine is planning to fit new thermostatic valves to some of the radiators in her house. The graph shows the callout charge and the fixed rate charged per radiator by one company, *Thermolok*, for this work.

[illegible][illegible][illegible]

(iv) If the company fits 8 valves, what will Áine have to pay?

[illegible]

(b) Another company, *Fixrad*, has no callout charge. *Fixrad* charges €60 per radiator.

(i) Complete the table to show the amounts charged by *Fixrad*.

Number of radiators	Charge (€)
0	
1	60
2	
3	
4	
5	
6	

(ii) Plot the *Fixrad* charges on the diagram in part **(a)**.

[illegible]

(iii) What is the point of intersection of the two graphs?

[illegible]

(iv) Áine decides to fit valves to 5 radiators. Which company should she choose if she wants to pay the least amount of money? Justify your answer by finding the amount she would save.

[illegible]