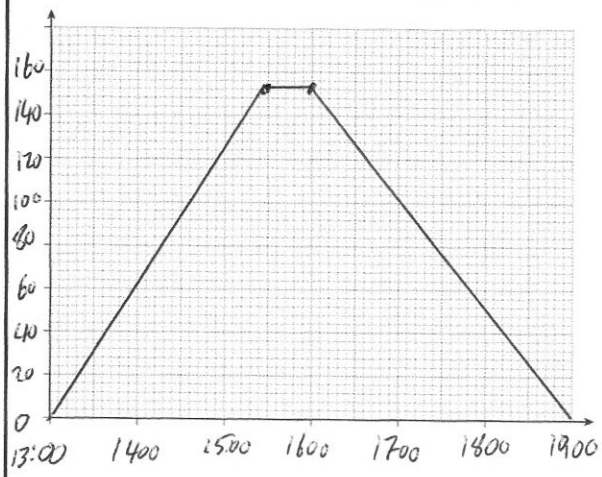
30th April **Higher 5-a-day**

Corbettmaths

Estimate $\sqrt[3]{120}$

≈ 4.9



Show this information on a distance-time graph.

Teddy leaves home at 13:00
He drives at an average speed of 60km/h for $2\frac{1}{2}$ hours $60 \times 2.5 = 150$km
Teddy stops for 30 minutes.
He then drives home at an average speed of 50km/h

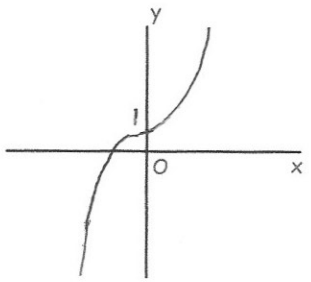
A film starts at 18:45

Does Teddy get home in time for the start?
Explain your answer.

No, he arrived at 19:00

Sketch

$y = x^3 + 1$



Make x the subject of
$p = 2(y + 5x)^3$

$\frac{p}{2} = (y + 5x)^3$

$\sqrt[3]{\frac{p}{2}} = y + 5x$

$\sqrt[3]{\frac{p}{2}} - y = 5x$

$x = \frac{\sqrt[3]{\frac{p}{2}} - y}{5}$