

h. $m = -3t + 208$

find t when $m = 196.5g$

$$196.5 = -3t + 208$$

$$196.5 - 208 = -3t$$

$$\frac{-11.5}{-3} = t$$

$$\underline{3.833}_{\text{min.}} = t$$

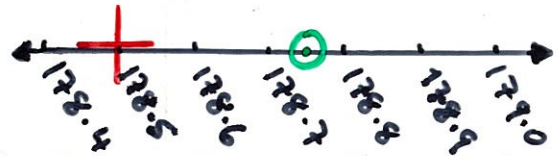


find m when $t = 9.75\text{min.}$

$$m = -3(9.75) + 208$$

$$m = -29.25 + 208$$

$$\underline{m = 178.75g}$$



i. The physical significance of the intercept is the initial mass of the candle.

j. The physical significance of the gradient is the rate at which the mass of the candle is decreasing.

k. The line of best fit was applied to be closest to the maximum number of points.