



b. The percentage of tins that contain more than 225 g of beans. (3)



### Solutions

1a.

Let X be the amount of beans in a tin, $P(X < 200) = 0.1$ $\frac{200 - \mu}{7.8}$	<b>M1</b>
$\frac{200 - \mu}{7.8} = -1.2816$	<b>M1</b>
$\mu = 209.96...$ $\mu = 10$	<b>M1</b>

1b.

$P(X > 225) = P(Z > \frac{225 - 210}{7.8})$	<b>M1</b>
$P(Z > 1.92)$	<b>M1</b>
$= 1 - 0.9726$ $= 0.0274$ (allow 2.7%/0.027)	<b>M1</b>

