### 7th April

Two clay models of the Statue of Liberty are mathematically similar.

The smaller model has a height of 15cm.
The larger model has a height of 20cm.
The smaller model weighs 108g.

Work out the weight of the larger model.

<table>
<thead>
<tr>
<th>Write ( x^2 - 6x + 17 ) in the form ((x - a)^2 + b)</th>
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</table>

Express \( r \) in terms of \( y \)

The cylinder and sphere have the same volume

Solve

\[
x^2 + y^2 = 36 \\
\frac{1}{2}x = y + 3
\]