### 9th August

#### Calculations

\[ g(x) = 15 - x \quad h(x) = x^3 \]

Solve \( gh(x) = 140 \)

#### Geometric Problems

**ABCDEFGH** is a cuboid

Calculate the length of BH

Find the size of angle BHF

**Sketch the graph of** \( y = 2^x \)

#### Sequence

The nth term of a sequence is \( n^2 - 10n + 30 \)

By using completing the square, show that every term is positive.