**4D Expressions Relating to Roots of Polynomials**

1. Expand
2. A cubic equation has roots , and such that and . Find the value of .

The sum of the doubles

- 2 x

The square of the sum of the singles

=

The sum of the squared singles

The sum of the triples

+ 3 x

The sum of the doubles

- 3 x

The cube of the sum of the singles

=

The sum of the cubed singles

1. The three roots of a cubic equation are , and .

Given that , and ,

find the value of .