

# Unit 4: Computing derivatives

## Vocabulary and notation

$f \circ g$   $\Delta f$  composition chain rule

## Skills

- Know the derivatives of all functions in Propositions 4.7 and 4.8
- Know and be able to use Propositions 4.1 – 4.5 for derivatives of sums, differences, products and quotients
- Know the chain rule (Proposition 4.6) and be able to recognize when and how to use it
- Know how to prove the sum rule and derivative of  $c f(x)$  from first principles
- Know the angle sum identities for sin/cos/tan and know how to use these to derive the formula for the derivative of each (Proposition 4.8 #6,7,8)