

# Checklist

## What you should know

By the end of this subtopic you should be able to:

- find derivatives of
  - $f(x) = \tan(x)$
  - $f(x) = \sec(x)$
  - $f(x) = \csc(x)$
  - $f(x) = \cot(x)$
  - $f(x) = a^x$
  - $f(x) = \log_a x$
  - $f(x) = \arcsin(x)$
  - $f(x) = \arccos(x)$
  - $f(x) = \arctan(x)$
- find indefinite integrals using the above functions
- find indefinite integrals of complex rational functions using partial fraction decomposition.

