

### Differentiation - Quotient Rule

Find  $f'(x)$ .

1.  $f(x) = \tan x = \frac{\sin x}{\cos x}$

2.  $f(x) = \frac{x+1}{x+2}$

3.  $f(x) = \frac{x^2}{\sin x}$

4.  $f(x) = \frac{x^3}{\cos x}$

5.  $f(x) = \frac{\ln x}{x^4}$

$$6. f(x) = \sec x = \frac{1}{\cos x}$$

$$7. f(x) = \frac{e^x + 1}{e^x - 1}$$

$$8. f(x) = \frac{\ln x}{x}$$

$$9. f(x) = \frac{e^x}{x^3}$$

$$10. f(x) = \cot x = \frac{\cos x}{\sin x}$$