

**15** Without using a calculator and showing all your working, express

$$\frac{4 - \sqrt{12}}{4 + \sqrt{12}}$$

in the form  $a - \sqrt{b}$  where  $a$  and  $b$  are integers.

(Total for Question 15 is 3 marks)

**16** (a) Simplify fully  $(5a^2b^3)^2$

(2)

(b) Simplify fully  $\frac{(9x^4y^2)^{\frac{1}{2}}}{3x^2y^{-4}}$

(2)

(Total for Question 16 is 4 marks)

