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 $\left(5a^2b^3\right)^2$

.....

(2)

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

.....

(2)

(Total for Question 16 is 4 marks)