

## National 5 Homework 2 – Surds and Indices

Please show your working for all the questions!

1. Simplify  $\sqrt{50} + \sqrt{2}$  2
2. Simplify  $\frac{\sqrt{20}}{\sqrt{5}}$  2
3. Rationalise the denominator for the following fraction  
 $\frac{14}{\sqrt{7}}$  Give your answer in the simplest form 2
4. Remove the brackets and simplify  $\sqrt{2}(\sqrt{6} - \sqrt{2})$  3
5. Simplify  $7c^2d^5 \times 2c^3d^{-2}$  3
6. Simplify  $\frac{ab^6}{a^3b^2}$   
write your answer with positive indices 2
7. Evaluate (a)  $7^0$  1  
(b)  $27^{\frac{4}{3}}$  2
8. Simplify  $(\sqrt{m})^4$  3