

Past Paper Questions – Negative and Fractional Indices
(You should be able to do these **without** using a calculator)

6

(d) Find the value of

(i) 10^{-2}

.....

(ii) 7^0

.....

(iii) $27^{\frac{2}{3}}$

13. (a) Find the value of $\left(\frac{27}{125}\right)^{-\frac{1}{3}}$

.....

(2)

17. (a) Evaluate

(i) 3^{-2}

(ii) $36^{\frac{1}{2}}$

.....

(iii) $27^{\frac{2}{3}}$

.....

(iv) $\left(\frac{16}{81}\right)^{-\frac{3}{4}}$

.....

14. (a) Work out

(i) 8^0

.....

(ii) 5^{-2}

.....

(iii) $27^{\frac{1}{3}}$

.....

(iv) $25^{\frac{1}{2}}$

.....

(4)

(b) Given that $x = 2^k$ and $\sqrt{\frac{4}{x}} = 2^c$, find c in terms of k .

$c =$

(1)