

K Education Centre

GCSE Maths - Foundation

Prime Factors, Indices, HCF and LCM

Assignment Questions

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Prime Factors, Indices , HCF and LCM Assignment

Q1: Write down following as product of their prime factors.

a) 200

b) 68

c) 72

Q2: Write down the HCF and LCM of following:

a) 20 and 220

b) 56 and 196

c) 16 and 20

Q3: Write down all the factors of 64.

Q4: Write as single power of 6.

a) $6 \times 6 \times 6 \times 6$ b) $6 \times 6 \times 6 \times 6 \times 6 \times 6$

Q5: Write as single power of 7

a) $\frac{1}{7 \times 7}$

b) $\frac{1}{7 \times 7 \times 7 \times 7}$

Q6: Simplify these expressions and leave your answers in index form.

a) $\frac{2^4 \times 2^6}{2^3}$

b) $\frac{8^3 \times 8^5}{8^2 \times 8}$

c) $\frac{4^{-2} \times 4^5}{4^4 \times 4^{-6}}$

Q7: Rewrite the following expression without indices.

a) 44^0

b) $\left(\frac{1}{4}\right)^3$

c) 16^{-1}

d) $\left(\frac{1}{3}\right)^3$

e) $\left(\frac{3}{2}\right)^{-2}$

Q8: Work out the value of n.

$$3^3 \times 3^6 = \frac{3^{20}}{3^n \times 3^{10}}$$