

Factors

1 List all the factors of

- (i) 12 (ii) 20 (iii) 17 (iv) 28

2 Find the highest common factor (HCF) of the following sets of numbers.

- (i) 12 and 18 (ii) 24 and 30 (iii) 40 and 120 (iv) 15, 30 and 45

Multiples

3 Write down the first five multiples of the following numbers.

- (i) 5 (ii) 12 (iii) 40 (iv) 19

4 Find the lowest common multiple (LCM) of the following sets of numbers.

- (i) 6 and 10 (ii) 15 and 25 (iii) 20 and 35 (iv) 3, 4 and 5

Index Numbers

5 Write the following numbers using index form.

- (i) $3 \times 3 \times 3 \times 3$ (ii) $2 \times 2 \times 2 \times 2 \times 2$ (iii) $4 \times 4 \times 7 \times 7 \times 7$
(iv) $2 \times 2 \times 7 \times 7 \times 9 \times 9 \times 9$

6 Work out the value of:

- (i) 6^2 (ii) 2^4 (iii) 4^3 (iv) 3^4
(v) $2^3 \times 3^2$ (vi) $2^5 \times 3^3$

Prime Factors

7 Express the following as a product of prime factors written in index form:

- (i) 240 (ii) 420 (iii) 1000 (iv) 189

8 **HCF and LCM Problems**

- (i) Three different lights flash every 5 seconds, 8 seconds and 12 seconds respectively. If they start flashing at the same time how long will it take for them to flash at the same time again.
- (ii) What is the largest number of people that could share 72 apples and 54 bananas?