SQUARES AND SQUARE ROOTS

FINDING SQUARE ROOT THROUGH REPEATED SUBTRACTION

EXERCISE

Q.1 Find the square roots of 100 and 169 by the method of repeated subtraction.

Q.2 Find the square roots of the following numbers by the prime Factorisation Method.

(i) 729 (ii) 400

(iii) 1764 (iv) 4096

(v) 7744 (vi) 9604

(vii) 5929 (vii) 9216

(ix) 529 (x) 8100

Q.3 For each of the following numbers, find the smallest whole number by which it should be multiplied so as to get a perfect square number. Also find the square root of the square number so obtained.

(i) 252 (ii) 180

(iii) 1008 (iv) 2028

(v) 1458 (vi) 768

Q.4 For each of the following numbers, find the smallest whole number by which it should be divided so as to get a perfect square. Also find the square root of the square number so obtained.

(i) 252 (ii) 2925

(iii) 396 (iv) 2645

(v) 2800 (vi) 1620

Q.5 Find the greatest 5-digit number which is a perfect square.

ANSWER KEY

1. 10, 13

2. (i) 27 (ii) 20 (iii) 42

(iv) 64 (v) 88 (vi) 98

(vii) 77 (viii) 96 (ix) 23

(x) 90

3. (i) 7; 42 (ii) 5; 30

(iii) 7, 84 (iv) 3; 78

(v) 2; 54 (vi)3; 48

4. (i) 7; 6 (ii) 13; 15

(iii) 11; 6 (iv) 5; 23

(v) 7; 20 (vi) 5; 18

5. 99856