Cubes and Cube Roots

Smallest Multiple That Is a Perfect Cube

EXERCISE

Q1. What is the smallest number by which 392 must be multiplied so that the product is a perfect cube?

Q2. What is the smallest multiple by which 441 may be multiplied so that the product is a perfect cube?

Q3. What is the smallest positive multiple of 8 that is a perfect cube?

Q4. Find the smallest number by which each of the following numbers must be multiplied to obtain a perfect cube.

(i) 243

(ii) 256

- (iii) 72
- (iv) 675

(v) 100

Q5. Find the smallest positive multiple of 5 that is also a perfect cube. What is the value of this perfect cube?

ANSWER KEY

- 1.28
- 2.21
- 3. 32
- 4. (i) 3 (ii) 2 (iii) 24 (iv) 15 (v) 10
- 5.25