# Worksheet: A Square and A Cube

Uttar Pradesh State Board · Class 8 · Mathematics · 12 questions · 27 marks

| Name: _____ | Date: _____ | Score: _____ / 27 |
|---|---|---|

**Q1.** What is $15^2$? *[1 mark]*

**Q2.** What is $6^3$? *[1 mark]*

**Q3.** Which of these numbers is a perfect square? *[1 mark]*

A) 1028

B) 1042

C) 1033

D) 1024

**Q4.** A number ending in which digit can NEVER be a perfect square? *[1 mark]*

A) 4

B) 8

C) 6

D) 9

**Q5.** Find 2304 using prime factorisation. *[3 marks]*

**Q6.** Find the cube root of 2197 by prime factorisation. *[3 marks]*

**Q7.** The smallest number by which 72 must be multiplied to make it a perfect square is: *[1 mark]*

A) 8

B) 3

C) 2

D) 6

**Q8.** Which of the following is a perfect cube? *[1 mark]*

A) 124

B) 128

C) 216

D) 144

**Q9.** Find 784 using prime factorisation. *[2 marks]*

**Q10.** Find the cube root of 3375 by prime factorisation. *[3 marks]*

**Q11.** Find the smallest number by which 392 must be MULTIPLIED to make it a perfect cube, and find the cube root of the resulting number. *[5 marks]*

**Q12.** Find the smallest number by which 2028 must be divided so that the quotient is a perfect square. Also find the square root of the quotient. *[5 marks]*