4 SQUARES AND SQUARE ROOTS

Q1. Without actual multiplication, write whether the square of the following numbers will be even or odd:

	Number		Odd/Even
a.	231	:	_____
b.	7462	:	_____
c.	980	:	_____
d.	2223	:	_____

Q2. Find the smallest number by which each of the following numbers should be divided to make it a perfect square and fill in the blanks:

a. 35280

35280 ÷ ____ = ____ is a perfect square

b. 4410

4410 ÷ ____ = ____ is a perfect square

Q3. Find the square root of the following using prime factorisation:

a. $17\frac{16}{25}$

$\sqrt{17\frac{16}{25}}$ = _____

b. 15876

$\sqrt{15876}$ = _____

c. 1.3456

$\sqrt{1.3456}$ = _____

Q4. Find the least number which should be subtracted or added to 4375 to make it a perfect square.

Answer:

4375 + _____ = _____ is a perfect square.

4375 – _____ = _____ is a perfect square.

Q5. Find the least number, which is divisible by 21, 14 and 18, and is a perfect square also.

Answer: _____

Q6. Simplify:

a. $\sqrt{0.0196}+\sqrt{0.0081}-\sqrt{1.21}$

Answer: _____

b. $\sqrt{26\frac{1}{4}+702\frac{1}{8}+\frac{5}{8}}$

Answer: _____

Q7. Students of a school collected ₹ 80,089 to the poor children fund. If each student donated as many rupees as there are children in the school, find the number of children in the school.

Answer: _____

Q8. Find the square root of the following:

a. 318.6225 : _____

b. 58.2169 : _____

Q9. If 237 × 237 = 56169, then find the product, without actual multiplication, and match the following:

23.7 × 23.7	0.056169
2.37 × 2.37	5.6169
0.237 × 0.237	561.69

Q10. Find the value of $\sqrt{5}$ upto 3 decimal places. Simplify and find the value of $\sqrt{\frac{3+\sqrt{5}}{3-\sqrt{5}}}$:

$\sqrt{5}$ = _____

$\sqrt{\frac{3+\sqrt{5}}{3-\sqrt{5}}}$ = _____

Answers

1. a. Odd; b. Even; c. Even; d. Odd
2. a. $35280 \div 5 = 7056$ is a perfect square;
   b. $4410 \div 10 = 441$ is a perfect square;
3. a. $4\frac{1}{5}$; b. 126; c. 1.16
4. a. $4375 + 114 = 4489$; b. $4375 - 19 = 4356$
5. 1764
6. a. –0.87; b. 27
7. 283 students
8. a. 17.85; b. 7.63
9.

23.7×23.7	561.69
2.37×2.37	5.6169
0.237×0.237	0.056169

10. $\sqrt{5} = 2.236$

    $\sqrt{\frac{3+\sqrt{5}}{3-\sqrt{5}}} = 2.618$