

1 . Encircle yes or No for each of following statement.

- (a) *Square of an even number is always an odd number.* **yes /No**
- (b) *(length of each side of square)² = Area of square* **yes /No**
- (c) *If $a^2 = b$, it means b is square root of a.* **yes /No**
- (d) *The prime factorization of 36 is $\sqrt[2]{2 \times 2 \times 3 \times 3}$* **yes /No**

2. Match each of the following expression to its correct symbolic form.

Statement	Symbolic Form
(i) <i>(- 5) squared</i>	$(6)^2$
(ii) <i>Square of + 12</i>	$(0)^2$
(iii) <i>Square of additive identity</i>	12^2
(iv) <i>6 raised to the power 2</i>	-5^2
	$(-5)^2$

3. Ayesha solved questions as follows, choose the step where she made mistake.

(i) *Square of - 9*

$$\text{Solution: } -9^2 \\ = + 81$$

(ii) *Square of + 13*

$$\text{Solution: } (13)^2 \\ = 2 \times 13 = 169$$

4. (i) Maazin find the square root of '90601' as given at

right ,Tick the option which is correct about his solution.

- (a) He made the wrong pairs.
- (b) He solved the question correctly but wrote wrong answer of square root.
- (c) He has solved the question correctly.

$$\begin{array}{r} 301 \\ 3 \overline{) 09 \ 06 \ 01} \\ \underline{9} \\ 60 \\ \underline{60} \\ 0 \\ 601 \\ \underline{601} \\ 0 \end{array}$$

∴, $\sqrt{90601} = 601$

(ii) Azwaah find the square root of '11025' as given at right,

Tick the option which is correct about her solution.

- (a) She made the wrong pair
- (b) She forget to write the second digit of quotient .
- (c) She has solved the question correctly.

$$\begin{array}{r} 15 \\ 1 \overline{) 01 \ 10 \ 25} \\ \underline{1} \\ 20 \\ \underline{20} \\ 0 \\ 205 \\ \underline{205} \\ 0 \end{array}$$

5. Choose the correct option of solution for each of following.

(i) The area of a square is 73.96m^2 . Calculate the length of its side

$$\begin{aligned} \text{Length of each side} \\ &= \sqrt[2]{73.96\text{m}^2} \\ &= 8.6 \text{ m} \end{aligned}$$

Option 1

$$\begin{aligned} \text{Length of each side} \\ &= (73.96)^2 \\ &= 5470.0816 \text{ m} \end{aligned}$$

Option 2

(ii) By which smallest number can 275 be multiplied to get a perfect square?

Do the prime factorization of 275

$$275 = 5 \times 5 \times 11$$

Here pair of 11 is incomplete ,
so if we multiply 275 with 11 it
will become a perfect square.

Option 1

Find square root of 275 by short
division method ,

$$\begin{array}{r} 16 \\ 1 \overline{) 275} \\ \underline{1} \\ 175 \\ 26 \overline{) 175} \\ \underline{156} \\ 19 \end{array}$$

So it should be multiplied with
19 to get a perfect square.

Option 2

6 . Choose the perfect squares?

121, zero , 15 , 96, 177, 961, $\frac{121}{81}$

7. Choose the best answer (only one) from given options.

(i) $\sqrt[2]{\frac{81}{256}}$ is same as :

(a) $\frac{9}{16}$

(b) $(\frac{3}{4})^2$

(c) both 'a' & 'b'

(d) $1\frac{7}{9}$

(ii) If square root of a number is 27 , the number is:

(a) 54

(b) 13.5

(c) $\sqrt[2]{27}$

(d) 729

(iii) Ayesha took a round around a square shaped ground & covered a distance
24m , perimeter of ground is :

(a) 24m

(b) 6m

(c) 96m

(d) $576m^2$

(iv) If Area of a square shaped field is $16m^2$, its perimeter will be:

(a) $16m^2$

(b) 4m

(c) 16m

(d) 8m

(v) square of square root of additive identity is:

(a) 1

(b) zero

(c) -1

(d) 2

(vi) Additive inverse of $\sqrt[2]{\frac{1}{4}}$ is:

(a) 2

(b) $\frac{1}{2}$

(c) -2

(d) $-\frac{1}{2}$