SIDDEEQ PUBLIC SCHOOL   MATHEMATICS   Class: 7

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 from.

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

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

(i)   Square of – 9

    Solution: -9^2

    = + 81

(ii)   Square of + 13

    Solution: $(13)^2$

    = 2 ×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.


```
              301
  3 | 09 06 01
       9
 60 |    06
          0
601 |      601
          601
            0
```
$\sqrt[2]{90601}$ = 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.


```
              15
  1 | 01 10 25
       1
 20 |    10
          0
205 |      1025
          1025
            0
```

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

(i) The area of a square is 73.96m². Calculate the length of its side

Length of each side
$= \sqrt[2]{73.96 m^2}$
= 8.6 m

Length of each side
$= (73.96)^2$
= 5470.0816 m

| Option 1 | Option 2 |

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

Do the prime factorization of 275	Find square root of 275 by short division method,
275 = 5 × 5× 11	
Here pair of 11 is incomplete,	
so if we multiply 275 with 11 it	So it should be multiplied with
will become a perfect square.	19 to get a perfect square.

Square root short division:

```
        16
    1 | 275
      |   1
   26 | 175
      | 156
      |  19
```

Option 1   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) 576m²

(iv) If Area of a square shaped field is 16m², its perimeter will be:

(a) 16m²   (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) $\frac{-1}{2}$