

**BA SANGAM COLLEGE**  
**YEAR 10**  
**MATHEMATICS**  
**WORKSHEET 3**

1.  $\sqrt{9x^2}$  is equal to

- |           |           |
|-----------|-----------|
| A. $6x^2$ | B. $9x$   |
| C. $3x$   | D. $3x^2$ |

2.

$3x^0$  can be simplified to

- |      |      |
|------|------|
| A. 3 | B. 2 |
| C. 1 | D. 0 |

3.

The value of  $(4^2)^3$  in base – index form is equal to

- |          |          |
|----------|----------|
| A. $4^8$ | B. $4^6$ |
| C. $4^5$ | D. $4^2$ |

4.

$a \times a \times a \times b \times b$  in base – index form is

- |              |             |
|--------------|-------------|
| A. $3a + 2b$ | B. $5ab$    |
| C. $3ab^2$   | D. $a^3b^2$ |

5.

The expression  $2^{-2}$  can be simplified to

- |                   |                  |
|-------------------|------------------|
| A. 4              | B. $\frac{1}{4}$ |
| C. $-\frac{1}{4}$ | D. -4            |

6.

Simplify:

(i)  $3p^2 \times p^2$

(ii)  $\frac{12a^3c}{4ac}$

7.

The value of  $(3^4)^2$  in base – index form is equal to

A.  $3^8$

B.  $3^6$

C.  $3^4$

D.  $3^2$

8.

$\sqrt{16x^2}$  is equal to

A.  $16x$

B.  $8x$

C.  $4x$

D.  $2x$

10.

$(2x)^0 + 5(x)^0$  can be simplified to

A. 7

B. 6

C. 5

D. 2

11.

The expression  $\left(\frac{1}{3}\right)^2$  can be simplified to

A. 9

B.  $\frac{1}{9}$

C.  $-\frac{1}{9}$

D. -9

12.

The expression  $\frac{12a^3c}{4ac}$  can be simplified to:

A.  $8a^2$

B.  $3a^2$

C.  $3a^3$

D.  $3a^3c$