

# GIRLS' HIGH SCHOOL AND COLLEGE, PRAYAGRAJ

SESSION : 2020-2021

CLASS- 8 ( A,B,C,D,E )

SUBJECT- MATHEMATICS

Assignment: 02

## TOPIC – ALGEBRAIC EXPRESSIONS

### Instructions for the E-learn assignment:

- (I) The Parents to ensure that their ward watches the video instructions for this assignment by clicking on the given link:  
<https://youtu.be/DQ70-wjbgY>, she should revise the lesson given in the book and then work on the assignment.
- (II) The completed assignment is to be downloaded and filed/pasted in the subject file/copy and kept ready for submission.
- (III) The day, date and procedure of submission shall be notified later.

### Solve the following:-

#### Q.1 Multiply:

- i.  $8ab^2$  by  $-4a^3b^4$
- ii.  $-\frac{2}{3}a^7b^2$  and  $-\frac{9}{4}ab^5$

#### Q.2 Multiply:

- i.  $2a^3 - 3a^2b$  and  $-\frac{1}{2}ab^2$
- ii.  $3 - \frac{2}{3}xy + \frac{5}{7}xy^2 - \frac{16}{21}x^2y$  by  $-21x^2y^2$

#### Q.3 Multiply:

- i.  $6x^3 - 5x + 10$  by  $4 - 3x^2$
- ii.  $(5a + 5b - c)(2b - 3c)$

#### Q.4 Find:

The base and the altitude of a triangle are  $(3x - 4y)$  and  $(6x + 5y)$  respectively. Find its area.

#### Q.5 (a) Solve:

- i. Multiply  $-4xy^3$  and  $6x^2y$  and verify your result for  $x = 2$  and  $y = 1$ .

**(b) Evaluate:**

- i.  $(3x - 2)(x + 5)$  for  $x = 2$ .
- ii.  $(2x - 5y)(2x + 3y)$  for  $x = 2$  and  $y = 3$

**Q.6 Divide:**

- i.  $-70a^3$  by  $14a^2$
- ii.  $15a^3b^4 - 10a^4b^3 - 25a^3b^6$  by  $-5a^3b^2$

**Q.8 Divide:**

- i.  $a^2 + 7a + 12$  by  $a + 4$
- ii.  $12x^2 + 7xy - 12y^2$  by  $3x + 4y$

**Q.9 Simplify:**

- i.  $3a - b \{a - (1 - a)\} - b(1 - 2a)$
- ii.  $2x - [y + \{y - (x + 2y)\}]$
- iii.  $3a [8b \div 4 - 6 \{a - (5a - 3b - 2a)\}]$

**Q.10 Simplify:**

- i.  $a^5 \div a^3 + 3a \times 2a$
- ii.  $x^5 \times x^7 \div x^4$

----- **END** -----