Worksheet

- 1. State whether true or false.
 - a. The difference between y and x when y < x is written as x y.
 - b. The sum of three times x and five times y is written as 5x + 3y.
 - c. For any literal, its multiplication with zero is always zero.
 - d. x divided by 4 is written as $\frac{4}{}$.
- 2. Write all the terms of the following expressions:

a.
$$xyz^2 + 3xyz - 9y^2$$
 b. $a^3 - b^3 + 3abc$

b.
$$a^3 - b^3 + 3abc$$

c.
$$\left(\frac{x^3}{3}\right) + x^2 + 2xy^2$$

- 3. If Heena's present age is x years, write her age
 - a. 3 years back
- b. two years from now
- c. five years from now

- 4. Seema has x flowers with her.
 - How many flowers will each of her friends have, if she decides to divide them equally among five of them?
 - b. How many will be left with her, if she gives 10 flowers to Reema?
 - c. How much she has to pay, if each flower costs ₹ 2?
- 5. Vijay and Sanjay start driving their cars from two towns at the same time coming towards each other. If Vijay drives for 3 hours at a speed of x km/h and Sanjay drives for 4 hours at the speed of y km/h, what is the total distance?
- Hema has ₹ 100 with her. She purchases two ribbons costing ₹ x per piece and y 6. flowers costing ₹4 per piece, how much money would be left with her?
- 7. If the maximum marks for an examination are x marks and Tina, Ina and Nina scored $\frac{x}{2}$, $\frac{x}{4}$ and $\frac{x}{6}$ marks, respectively, what is the total of their marks?
- 8. If y is an odd number, what is the sum of the 5th number after y and 3rd number before y?
- 9. Group the like terms, if any, from the following terms.
 - a. $3x^2y^2$, $5xy^2$, $4x^2y$, $8x^2y^2$, xy^2 , $7x^2y$ b. $3mn^2$, $5x^2n^3$, $4m^2n$
- The length of a rectangle is $\frac{1}{5}$ th of its breadth. Find its area and perimeter. 10.
- 11. Suresh has x books. Hemant has twice the number of books as Suresh has, and Naresh has 3 more books than Suresh has. How many books do they have in total?
- Write the degree of each polynomial and the sum of their degrees. 12.
 - a. $3x^3 + 2x^2 + 5$ and $4v + 5v^4 + v^2$
- b. $15p^6 + 2p + 8p^9$ and $3n^3 + 6n^7$
- c. $l^1 + 2l^9$ and $4a^5 + 6a^6$
- Mr Dhanraj has ₹ y in his account. He wants to give $\frac{1}{3}$ of it to his son and $\frac{1}{6}$ of it 13. to a charity and the rest to his daughter. What is the daughter's share?

- 14. Sheela walks a km every day. How much distance does she cover in
 - a. a week?
- b. In the month of February of a leap year?
- Write the following in terms of statements. 15.

a.
$$2x + 9$$

b.
$$\left(\frac{x}{5}\right) - 9$$

c.
$$13 - 6x$$

$$d. 2a + 9b$$

e.
$$(m \times m) - 3$$

Answers to Worksheet

- 1. a. True
- b. False
- c. True
- d. False

2. a.
$$xyz^2$$
, $3xyz$, $-9y^2$

b.
$$a^3, -b^3, 3abc$$

2. a.
$$xyz^2$$
, $3xyz$, $-9y^2$ b. a^3 , $-b^3$, $3abc$ c. $\frac{x^3}{3}$, x^2 , $2xy^2$
3. a. $(x-3)$ years b. $(x+2)$ years c. $(x+5)$ years
4. a. $\frac{x}{5}$ b. $x-10$ c. $₹2x$ 5. $(3x+4y)$ km

3. a.
$$(x - 3)$$
 years

b.
$$(x + 2)$$
 years

c.
$$(x + 5)$$
 years

4. a.
$$\frac{x}{5}$$

6.
$$(100 - (2x + 4y))$$
 7. $\frac{x}{2} + \frac{x}{4} + \frac{x}{6}$ 8. $y + 5 + y - 3$

7.
$$\frac{x}{2} + \frac{x}{4} + \frac{x}{6}$$

8.
$$y + 5 + y - 3$$

9. a.
$$(3x^2y^2, 8x^2y^2)$$
, $(5xy^2, xy^2)$ and $(4x^2y, 7x^2y)$

9. a.
$$(3x^2y^2, 8x^2y^2)$$
, $(5xy^2, xy^2)$ and $(4x^2y, 7x^2y)$ b. No like terms
10. Area = $\frac{1}{5}x \times x$ and Perimeter = $2\left(\frac{1}{5}x + x\right)$ 11. $x + 2x + x + 3$

11.
$$x + 2x + x + 3$$

c. 9, 6, 15 13.
$$y - \left(\frac{y}{3} + \frac{y}{6}\right)$$

- b. x divided by 5 and reduced by 9.
- c. x multiplied by 6 and then subtracted from 13.
- d. Sum of two times a and 9 times of b.
- e. m multiplied by itself and reduced by 3.