Finding the value of an Expression

1. **Find the value of the following expressions, when x = – 3.**

   A. $5x + 8$

   B. $-2x^2 + 5x + 7$

   C. $4x^2 - 3x - 8$

2. **If x = 2, y = – 2, find the value of:**

   A. $x^2 + xy + y^2$

   B. $x^2 - 2xy - y^2$

   C. $x^2 + 3y^2$

3. **a = 0, y = -2 find the value of the following expressions:**

   A. $3x^2 + 4xy + 4$

   B. $4x^2y + 3x\,y^2 + 2xy$

4. **If x = 3, y = –1 and 2 = –2, find the value of the following expressions:**

   A. $5x^2yz - 3x\,y^2\,z + 4xyz$

   B. $x^2 + y^2 + z^2 - xy - yz - zx$

   C. $x\,y^2 - xyz + 9x\,y^2\,z + 16$

5. **If a = 9, find the value of $a^3 - 4\,(a - 9)$.**

6. **If b = –15, find the value of $b^4 - 3b^2 - 200$.**

7. **Simplify the expression and find its value when a = 3 and b = –5: $3(a^3 + a^2\,b) + 4 - 2ab$.**

8. **If p = –3, q = –1 and r = 2, find the value of:**

   $3\,p^2\,q^2\,r^2 - 2pqr + 7$

9. **Evaluate the following for a = 2, b = –1, c = –2.**

   A. $\frac{1}{5} a^2 - b + c$

   B. $2a^2b^2 - 5ab + 7$

10. **A number has two digits with a in tens place and b in the units place. If the digits are reversed, what will be the new number?**

11. **Ruhi is twice as old as Kajal. If Kajal is x years old, what is the sum of Ruhi's and Kajal's age?**

12. **Write the type of each in the given expressions as Monomial, Binomial and Trinomial.**

   A. $\frac{-8}{13} x^2y\, z^2$

   B. $3\, x^2y^2$

   C. $8xy^2 - 3x^2y + \frac{5}{9} x^2y^2$

   D. $3a^2b + 8$