

Test (IX)

UNIT 2

Q1 Factorize

$$2x^3 + x^2 - 13x + 6$$

Q2

Given that $x - 1$ is a factor of the expression $x^3 - kx + 2$, find the value of k and the remainder when the expression is divided by $x - 2$.

$$k = \boxed{}$$

$$\text{Remainder} = \boxed{}$$

Q3. Find remainder

$$2x^3 + 4x^2 - 6x + 7 \text{ is divided by } 2x - 1. \quad R = \boxed{}$$

Q4.

Find the value of k if:

(a) $x^3 + x^2 - kx + 4$ has a remainder of 8 when divided by $x - 2$.

$$k = \boxed{}$$

Q5.

Create your own example of:

a) a monomial with degree one

b) a binomial with a constant term of -3

c) a trinomial with the variable "b" and coefficients of 2 and 5

Q6. If $p(x) = 2x^3 - x^2 + 3x + 1$. Find the value of $\frac{p(1)+p(-1)}{2}$

$$\text{Sol } p(1) = \boxed{}$$

$$p(-1) = \boxed{}$$

$$\text{So } \frac{p(1)+p(-1)}{2} = \boxed{}$$

Q7. Find zeroes of $p(x) = x^2 - 22x + 105$

$$x = \boxed{} ; \boxed{}$$