

Class 8

Mathematics

: 10 marks

① (i) Find 5 rational numbers between $\frac{3}{5}$ & $\frac{4}{5}$?

(ii) Locate $\sqrt{5}$ on the no. line

② (i) $(3 + \sqrt{3})(2 + \sqrt{2})$

(ii) $7^{1/2} \cdot 8^{1/2}$

③ (i) Give one example each of a binomial of degree 35, & of a monomial of degree 100

(ii) Find the value of the polynomial $5x - 4x^2 + 3$ at $x = 0$, $x = -1$ and $x = 2$.

④ (i) Find the remainder when $x^3 - ax^2 + 6x - a$ is divided by $x - a$.

(ii) Factorise: $12x^2 - 7x + 1$

$x^3 + 13x^2 + 32x + 20$

⑤ Write any 4 identities and factorise the following using appropriate identities:

(a) $9x^2 + 6xy + y^2$

(b) $x^2 - \frac{y^2}{100}$