

1. Arti did a survey among her friends to find out which news channel they like to watch most. She gathered the following data.

Channel A	Channel B	Channel C	Channel D
6	5	4	5

Represent the data using a pie chart.

2. The following table gives the quantity of petrol and its cost

No of Liters of petrol	10	15	20	25
cost of petrol (in ₹)	₹ 300	₹ 450	₹ 600	₹ 750

Draw a linear graph by plotting the points.

3. Factorise the following

a) $y^2 + 19y + 60$

b) $p^2 + 6p - 16$

c) $y^2 + y - 72$

d) $4x^2 - 8x + 3$

e) $6x^2 - 5xy - 6y^2$

f) $28 - 31x - 5x^2$

g) $y^2 - 6y - 135$

h) $a^2 - 10a + 21$

i) $(\cancel{x^2} \cancel{y^2}) (p^2 - q^2)(r^2 - s^2) - 4pqrs$

j) $a^4 + a^2 + 1$

k) $81(3x - 4y)^2 - 121(2x + y)^2$

4. Solve the following questions

(i) $9x^2y^2(3z-24) \div 27xy(z-8)$

(ii) $96abc(3a-12)(5b-30) \div 144(a-4)(b-6)$

(iii) $8(x^3y^2z^2 + x^2y^3z^2 + x^2y^2z^3) \div 4x^2y^2z^2$

(iv) $5y^2 - 20y - 8z + 2yz$

(v) $10ab + 4a + 5b + 2$