(ii) $a^2 + 8a + 16$

x y

$= a^2 + 4a + 4a + 16$

$= a(a+4) + 4(a+4)$

$= (a+4)(a+4)$

or

$a^2 + 8a + 16$

$= a^2 + 2 \times a \times 4 + 4^2$

$= (a+4)^2$ [$\because a^2 + 2ab + b^2 = (a+b)^2$]

$= (a+4)(a+4)$

required

xy = I term × III term

$= 16a^2$

$x + y$ = II term

$= 8a$

quotient	divisor
16	1
8	2
4	4

$4 + 4 = 8$ and $4 \times 4 = 16$ which is required

(iii) $p^2 - 10p + 25$

$= p^2 - 2 \times p \times 5 + 5^2$

$= (p-5)^2$ [$\because a^2 - 2ab + b^2 = (a-b)^2$]

$= (p-5)(p-5)$

(iii) $25m^2 + 30m + 9$

$= (5m)^2 + 2 \times 5m \times 3 + 3^2$

$= (5m+3)^2$ [$\because a^2 + 2ab + b^2 = (a+b)^2$]