5 (i) p^2+6p+8

a b

$= p^2+2p+4p+8$

$= p(p+2)+4(p+2)$

$= (p+2)(p+4)$

required

ab = I term × III term

$= 8p^2$

$a+b$ = II term

$= 6p$

divisor	quotient
1	8

$1 \pm 8 \neq 6$

2	4

$2+4=6$

$2\times 4=8$

which is required

(ii) $q^2-10q+21$

$= q^2-7q-3q+21$

$\Rightarrow q(q-7)-3(q-7)$

$= (q-7)(q-3)$

(iii) $p^2+6p-16$

$= p^2+8p-2p-16$

$= p(p+8)-2(p+8)$

$= (p+8)(p-2)$