4.

$3\,k$

$k + 6$

$21\,k$
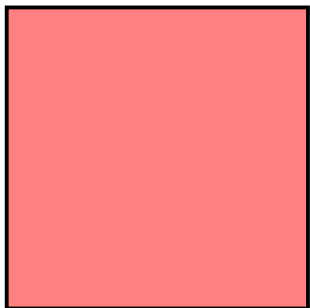
$6\,k^2 + 18\,k$

$3\,k^2 + 18\,k$

$3\,k + 6\,k^2$

Solution

$= (k+6) \times (3\,k)$
$= 3\,k^2 + 18\,k$