

b) $x^2 - 13x + 12$

The coefficient of x is _____, so the sum of the factors is _____.

The constant term is _____, so the product of the factors is _____.

Factors of _____	Sum of the factors
$1 \times$ _____	$1 +$ _____ $=$ _____
$(-1) \times$ (_____)	$-1 -$ _____ $=$ _____
$2 \times$ _____	$2 +$ _____ $=$ _____
$(-2) \times$ (_____)	$-2 -$ _____ $=$ _____
$3 \times$ _____	$3 +$ _____ $=$ _____
$(-3) \times$ (_____)	$-3 -$ _____ $=$ _____

_____ is positive, so both its factors have the same sign.
The x -term is _____, so both factors must be _____.

Once you have found the sum you need, you don't have to add any more factors.

The factors of _____ are _____ and _____.

So, $x^2 - 13x + 12 = (x - \text{_____})(x - \text{_____})$

c) $n^2 - 8n - 20$

The sum of the factors is _____.

The product of the factors is _____.

Factors of _____	Sum of the factors
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

So, $n^2 - 8n - 20 = \text{_____}$

d) $c^2 + 7c - 18$

Factors of _____	Sum of the factors
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

So, $c^2 + 7c - 18 = \text{_____}$