

## 11.7 Homework

### Question 1

Factorise;

( i )  $x^2 + x - 30$

*Multiply to give 30, subtract to give 1*

( ii )  $x^2 + 8x - 9$

*Multiply to give 9, subtract to give 8*

( iii )  $x^2 + 7x - 44$

*Multiply to give 44, ...*

( iv )  $x^2 + 10x - 24$

*Multiply to give 24, ...*

( v )  $x^2 + 10x - 39$

( vi )  $x^2 + 9x - 22$

( vii )  $x^2 + 5x - 14$

( viii )  $x^2 + 3x - 28$

( ix )  $x^2 + 4x - 5$

( x )  $x^2 + 3x - 54$

### Question 2

Factorise;

( i )  $x^2 - 4x - 12$

*Multiply to give 12, subtract to give 4*

( ii )  $x^2 - 4x - 5$

*Multiply to give 5, ...*

( iii )  $x^2 - 3x - 70$

( iv )  $x^2 - 4x - 77$

( v )      $x^2 - 3x - 28$

( vi )      $x^2 - 3x - 40$

( vii )      $x^2 - 5x - 14$

( viii )      $x^2 - 4x - 32$

( ix )      $x^2 - 3x - 10$

( x )      $x^2 - 6x - 7$

**Question 3 (Hard potatoes)**

Factorise;

( i )      $x^2 - 9x - 36$

( ii )      $x^2 + 20x - 44$

( iii )      $x^2 + 9x - 70$

( iv )      $x^2 - 9x - 52$

( v )      $x^2 - 14x - 72$

( vi )      $x^2 + 30x - 64$