

## 10.7 Homework

### Question 1

Factorise;

( i )  $x^2 + 12x + 20$

*Multiply to give 20, add to give 12*

( ii )  $x^2 + 10x + 21$

*Multiply to give 21, add to give 10*

( iii )  $x^2 + 13x + 22$

*Multiply to give 22, ...*

( iv )  $x^2 + 10x + 16$

*Multiply to give 16, ...*

( v )  $x^2 + 11x + 24$

( vi )  $x^2 + 15x + 50$

( vii )  $x^2 + 12x + 35$

( viii )  $x^2 + 9x + 20$

( ix )  $x^2 + 8x + 7$

( x )  $x^2 + 12x + 32$

### Question 2

Factorise;

( i )  $x^2 - 7x + 10$

*Multiply to give 10, add to give 7*

( ii )  $x^2 - 11x + 30$

*Multiply to give 30, ...*

( iii )  $x^2 - 13x + 36$

( iv )  $x^2 - 18x + 80$

( v )      $x^2 - 14x + 49$

( vi )      $x^2 - 10x + 25$

( vii )      $x^2 - 4x + 3$

( viii )      $x^2 - 8x + 12$

( ix )      $x^2 - 18x + 81$

( x )      $x^2 - 6x + 9$

**Question 3 (tough nuts)**

Factorise;

( i )      $x^2 - 19x + 60$

( ii )      $x^2 + 19x + 34$

( iii )      $x^2 + 25x + 100$

( iv )      $x^2 - 18x + 45$

( v )      $x^2 + 18x + 65$

( vi )      $x^2 - 26x + 88$