

## Answers to Worksheet 15 - Lesson 46

- 1)  $x^2(x-1)(x^2+x+1)(x+1)(x^2-x+1)=0$       2)  $(x-1)(x+1)(x^2+1)(x-2)(x+2)(x^2+4)=0$   
3)  $x^2(x^2+2)(x^2+4)=0$       4)  $x(x-1)(x^2+x+1)(x+1)(x^2-x+1)=0$   
5)  $\left\{\frac{5+i\sqrt{71}}{6}, \frac{5-i\sqrt{71}}{6}\right\}$       6)  $\left\{\frac{1+i\sqrt{23}}{6}, \frac{1-i\sqrt{23}}{6}\right\}$       7)  $\left\{\frac{2+i\sqrt{2}}{2}, \frac{2-i\sqrt{2}}{2}\right\}$   
8)  $\{-2+i\sqrt{5}, -2-i\sqrt{5}\}$       9) 12      10) 360  
11) 120      12) 60      13) 210      14) 85,140