Exemplar P1 Q5

5. For the polynomial, $x^3 - 4x^2 + ax + b$
   - $x-1$ is a factor
   - $-12$ is the remainder when it is divided by $x-2$

(a) Determine the values of $a$ and $b$.
(b) Hence solve $x^3 - 4x^2 + ax + b = 0$.

Answers

(a) $a = -7, \ b = 10$
(b) $x = 1, \ x = 5, \ x = -2$