1) Solve the following inequations

  i) $2x + 4 > x - 5$

  ii) $2x + 4 > 7x - 41$

  iii) $\frac{x-2}{4} \leqslant \frac{x-4}{5}$

  iv) $1 - \frac{x-2}{4} \leqslant \frac{x-4}{5}$

2) Solve the following inequations

  i) $(x-3)(x-4) \geqslant 0$

  ii) $(2x-3)(x-4) \geqslant 0$

  iii) $(x-3)(x-4)(x+2) \geqslant 0$

  iv) $(x-3)(x-4)^2 < 0$

  v) $(x-3)^3(x-4)^8 < 0$

  vi) $(x-3)^4(x-4)^2 \leqslant 0$

3) Solve the following inequations

  i) $(x-3)(x-4) \geqslant 1$

  ii) $(2x-3)(x-4) \geqslant x$

4) Solve the following inequations

  i) $(x^2 - 13x + 30)(x^2 + 2x - 8) < 0$

  ii) $(x^2 - 13x + 30)(x^2 - 2x - 8) > 0$

5) The graph below shows the parabola of equation $y = 4x^2 - 16x + 7$

  For what values of x the curve is under the $x-\text{axis}$?