1) Solve : $x^{2}-14=155$ 2) Solve $9x^{2}-21=0$

3)Solve: $(x+3)^{2}=16$ 4)Solve: $-2(4x-1)^{2}+75=3$

5) Solve: $\frac{1}{2}(2n-5)^{2}-3=6$ 6) Solve: $\frac{3}{x^{2}-1}=1$

7) Solve: $x^{2}+8x+11=0$ 8) Solve: $2x^{2}-5x-1=0$

9) Solve: $\frac{3}{x}-\frac{4}{2x}=x+1$

10) Write a quadratic equation with the given roots:

a) $\sqrt{7 }$ and $-\sqrt{7}$ b) $5+\sqrt{2}$ and $5-\sqrt{2}$

11) A rectangular skating rink measures 40 m by 20m. It is to be doubled in area by extending each side by the same amount. Determine how much each side should be extended, to the nearest tenth of a meter.

12) The sum of two numbers is 14 and their product is 37. Find the two numbers? Write your answers in simple radical form and to the nearest hundredth.