QUIZ 4.1 – 4.2

1. Factor completely :
a) $x^{2}+7x-18$

b) $3x^{2}-x-4$

c) $(x^{2}-x)^{2}-8\left(x^{2}-x\right)+12$

d) $(x^{2}-4)^{2}-(x-2)^{2}$
2. Solve graphically with your calculator: $x^{2}-20x+7=0$ to the nearest hundredth. You don’t need to show your work.
3. Solve graphically: $ 2x^{2}-7x-15=0$
(show all your work and don’t forget to state the solution(s) at the end !)


4. Solve by factoring:
a) $x^{2}+8x-20=0$

b) $x^{2}+13x=-36$
5. The height of a ball can be modeled by the function : $h\left(x\right)= -0.1x^{2}+3.2x-6$, where *x* is the horizontal distance of the ball from the goal line, in metres, and *h* is the height of the ball above ground, in metres. Determine the distance travelled by the ball after being kicked on the ground.
6. The frame of a picture a dimensions : *w* and *w* + 2,5. The area of the frame is 161 $po.^{2}$.
Determine its dimensions.