## Solve, and sketch a graph of the related function.

1) Find the solutions to the following quadratic equation: $s^{2}=18 s-81$

2) Find the roots of the equation $3 r^{2}-12=0$.

3) If $f(x)=-(2 x+5)(x+7)$, find the zeros of $f(x)$, and sketch its graph.


Solve.
4) Find the zeros of the function $y=24 x^{2}-8 x$.
5) What is the solution set of the equation $156=-2 n^{2}-38 n ?$
6) The area of a rectangular room is given by the equation $L^{2}-5 L=66$, where $L$ is the length of the room. Find the length.

