1. Simplify the following expression: $\frac{x+2 a-3}{x+1}-\frac{x+6}{2 x}$.
2. Let $g(x)=5 x^{2}-2 x+3$ and $h(x)=\sqrt{9 x+7}$. Find $g(h(2))$.
3. Solve for $a$ in $\sqrt{19-3 a}+5=a$. Find all solutions.
