1. S. 302 Nr. 8

a)

$$
\begin{aligned}
H_0 : p &= 0.3 = 30\ \% \\
s &= 0.05 = 5\ \% \\
n &= 100 \\
\mu &= n \cdot p = 100 \cdot 0.3 = 30 \\
\sigma &= \sqrt{n \cdot p \cdot (1-p)} \\
&= \sqrt{30 \cdot 0.7} \\
&= \sqrt{21} \\
&\approx 4.51
\end{aligned}
$$