1.8.16 Everyone needs a calculator again today.

Solve each equation. Remember to check for extraneous solutions.
Step 1: Isolate the square root
Step 2: Square both sides
Step 3: Solve resulting equation.
Step 4: Check your answer to make sure it is not extraneous!

5) $\sqrt{17-n}=\sqrt{n-7}$

$17-n=n-7$
$+7 \quad +7$
$24-n=n$
$+n \quad +n$
$\frac{24}{2}=\frac{2n}{2}$
$12=n$

$\sqrt{17-12}=\sqrt{12-7}$
$\sqrt{5}=\sqrt{5}\surd$

6) $\sqrt{1-9n}=\sqrt{-1-11n}$

$1-9n=-1-11n$
$+1 \quad +1$
$2-9n=-11n$
$+9n \quad +9n$
$\frac{2}{-2}=\frac{-2n}{-2}$
$-1=n$

$\sqrt{1-9(-1)}=\sqrt{-1-11(-1)}$
$\sqrt{10}=\sqrt{10}\surd$