## SEARCH AND SOLVE

Find the Mistake
Describe and correct the error in simplifying the expression. *Assume all variables are positive.

$$
\begin{aligned}
\left(16 x^{4} y^{6}\right)^{\frac{2}{3}} & =\left(\sqrt{16 x^{4} y^{6}}\right)^{3} \\
& =\left(4 x^{2} y^{3}\right)^{3} \\
& =64 x^{6} y^{9}
\end{aligned}
$$

## Solve

Find the solution(s) to each of the following equations.

1) Solve: $(x+1)^{2}=4$
2) Solve: $3(2 n-1)^{2}-7=20$
3) Solve: $-2(6 n+1)^{3}+4=-6$
4) Solve: $3(x+1)^{\frac{4}{3}}=48$
