

# Work Sheet

1. Solve the following equations. Don't forget to state the solution set.

a)  $3^{2x} - 3^{x+1} - 18 = 0$

b)  $4^x - 2^{x+1} = 48$

c)  $25^x - 15 \cdot 5^x + 50 = 0$

d)  $3^{2x+1} + 3 = 10 \cdot 3^x$

Answers:

a)  $L = \left\{ \frac{\ln(6)}{\ln(3)} \right\}$

b)  $L = \{3\}$

c)  $L = \left\{ \frac{\ln(10)}{\ln(5)}; 1 \right\}$

d)  $L = \{\pm 1\}$