

# Homework

p. 504: 41 – 44, 58

**FINDING INVERSES** Find the inverse of the function.

41.  $y = e^{x+2}$

42.  $y = 2^x - 3$

43.  $y = \ln(x + 1)$

44.  $y = 6 + \log x$

58. **ALTIMETER** Skydivers use an instrument called an altimeter to track their altitude as they fall. The altimeter determines altitude by measuring air pressure. The altitude  $h$  (in meters) above sea level is related to the air pressure  $P$  (in pascals) by the function in the diagram below.

$$h = -8005 \ln \frac{P}{101,300}$$

What is the altitude above sea level when the air pressure is 57,000 pascals?

Also, what is the air pressure when the altitude above sea level is 6000 meters?