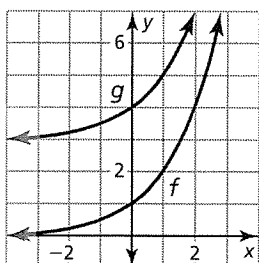


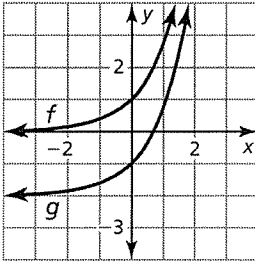
**6.4 Practice A**

1. translation 3 units up

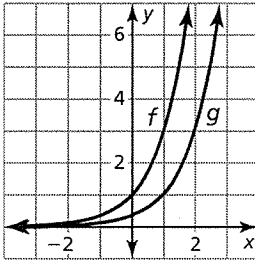


# Answers

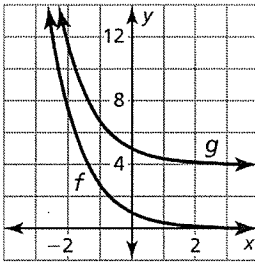
2. translation 2 units down



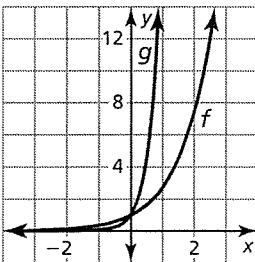
3. translation 1 unit right



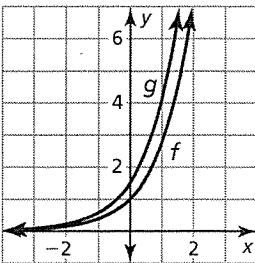
4. translation 4 units up



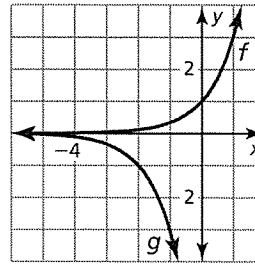
5. horizontal shrink by a factor of  $\frac{1}{3}$



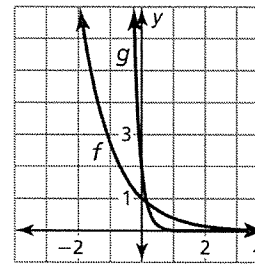
6. vertical stretch by a factor of  $\frac{3}{2}$



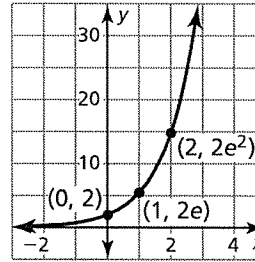
7. reflection in the  $x$ -axis, followed by a horizontal translation 2 units left



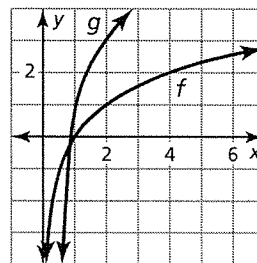
8. horizontal shrink by a factor of  $\frac{1}{5}$  and a vertical stretch by a factor of 2



9. incorrectly evaluates as  $(2e)^x$ , but in  $f(x) = 2e^x$ , the 2 is the leading coefficient and not part of the base

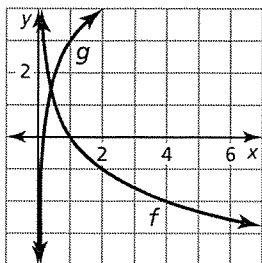


10. vertical stretch by a factor of 4, followed by a translation 1 unit down



# Answers

11. reflection in the  $x$ -axis, followed by a translation 3 units up



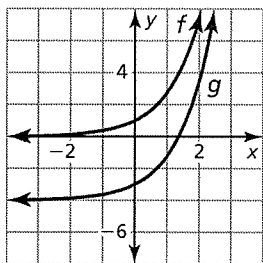
12.  $g(x) = -3^{x+3} - 1$     13.  $g(x) = \frac{1}{4}e^x + 5$

14.  $g(x) = \log_8(-(x + 4))$

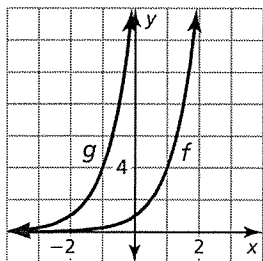
15.  $g(x) = 9\log_{1/6}(x - 2) - 3$

## 6.4 Practice B

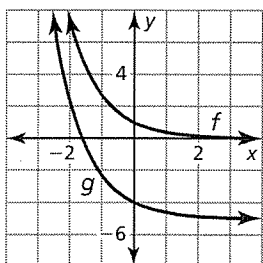
1. translation 4 units down



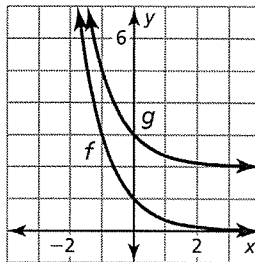
2. translation 2 units left



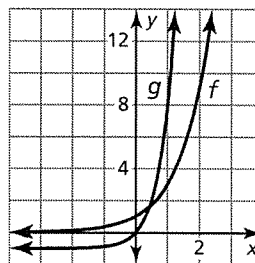
3. translation 5 units down



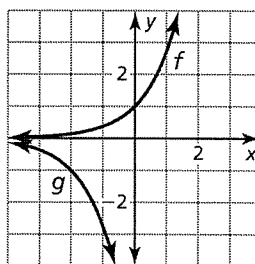
4. translation 2 units up



5. horizontal shrink by a factor of  $\frac{1}{2}$ , followed by a translation 1 unit down



6. reflection in the  $x$ -axis, followed by a translation 2 units left



7. translation 1 unit right, followed by a horizontal shrink by a factor of  $\frac{1}{4}$

