

Write the new function for each translation of the parent function  $y = 4(\frac{2}{3})^x$

8. 6 units down

$$y = 4(\frac{2}{3})^x - 6$$

9. 5 units left

$$y = 4(\frac{2}{3})^{x+5}$$

10. 4 units right and 3 units up.

$$y = 4(\frac{2}{3})^{x-4} + 3$$

11. Evaluate each expression to 4 decimal places:

a)  $e^4$

$$54.5982$$

b)  $e^{\frac{3}{2}}$

$$1.9477$$

c)  $e^{-3}$

$$.0498$$

12. Suppose you open an account with \$15000, at 1.3% interest, compounded continuously.

a) How much is in the account after 3 years?

$$A = 15000e^{3(-0.013)} = \$15596.56$$

b) How much is in the account after 20 years?

$$A = 15000e^{20(-0.013)} = \$19453.95$$