

Wed Dec 5 09:42:17 MST 2007

/m143.fa07/handouts143/ExpFunTabB14/ExpFunTabB14

These are alleged answers. For each error herein, you get extra-credit points for being the first to report it by e-mail.

1 $y = 4^x$

2 $y = 5 \left(\frac{16}{5} \right)^{x/2}$

3 $f(x) = 5 \left(\frac{9}{5} \right)^{(x-3)/7}$

4 $f(x) = 9 \cdot \left(\frac{7}{9} \right)^{(x-2)/3}$

5 The run is 8, so $f(x) = \frac{5}{9} \cdot a^x$, where

$$\frac{5}{9} \cdot a^8 = \frac{1}{5} \quad \text{or} \quad a^8 = \frac{9}{25}$$

Thus $a = \left(\frac{9}{25} \right)^{1/8}$.

Thus $f(x) = \frac{5}{9} \cdot \left(\frac{9}{25} \right)^{(x+2)/8}$.

Thus $f(14) = \frac{9}{125}$.

6 $N(t) = 50,000 \cdot \left(\frac{18}{5} \right)^{t/4}$

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