Name : _____ Score : _____

Teacher : _____ Date : _____

Exponential Functions

Evaluate each function at the given value. Round to the nearest hundredth if needed.

1) $g(y) = \frac{9}{4} \cdot \left(\frac{2}{8}\right)^{y}$ at $y = 6$

2) $g(y) = \frac{1}{2} \cdot \left(\frac{1}{3}\right)^{y}$ at $y = -2$

3) $f(y) = \frac{5}{9} \cdot \left(\frac{1}{2}\right)^{y}$ at $y = -2$

4) $g(x) = 9 \cdot \left(\frac{1}{2}\right)^{x}$ at $x = -2$

5) $f(n) = 4 \cdot \left(\frac{1}{2}\right)^{n}$ at $n = 3$

6) $f(n) = \frac{2}{3} \cdot \left(\frac{1}{2}\right)^{n}$ at $n = 2$

7) $h(n) = 3 \cdot \left(\frac{2}{4}\right)^{n}$ at $n = 2$

8) $f(y) = 2 \cdot 2^{y}$ at $y = -3$

9) $f(x) = \frac{1}{6} \cdot 2^{x}$ at $x = 5$

10) $f(y) = \frac{1}{6} \cdot 2^{y}$ at $y = -2$

11) $f(n) = \frac{8}{3} \cdot 2^{n}$ at $n = 5$

12) $f(n) = \frac{3}{2} \cdot 2^{n}$ at $n = -3$

13) $g(n) = 8 \cdot \left(\frac{3}{9}\right)^{n}$ at $n = -3$

14) $f(y) = 5 \cdot 2^{y}$ at $y = 6$

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Teacher : _____ Date : _____

Exponential Functions

Evaluate each function at the given value. Round to the nearest hundredth if needed.

1) $g(y) = \frac{9}{4} \cdot \left(\frac{2}{8}\right)^y$ at $y = 6$

0

2) $g(y) = \frac{1}{2} \cdot \left(\frac{1}{3}\right)^y$ at $y = -2$

4.5

3) $f(y) = \frac{5}{9} \cdot \left(\frac{1}{2}\right)^y$ at $y = -2$

2.22

4) $g(x) = 9 \cdot \left(\frac{1}{2}\right)^x$ at $x = -2$

36

5) $f(n) = 4 \cdot \left(\frac{1}{2}\right)^n$ at $n = 3$

0.5

6) $f(n) = \frac{2}{3} \cdot \left(\frac{1}{2}\right)^n$ at $n = 2$

0.17

7) $h(n) = 3 \cdot \left(\frac{2}{4}\right)^n$ at $n = 2$

0.75

8) $f(y) = 2 \cdot 2^y$ at $y = -3$

0.25

9) $f(x) = \frac{1}{6} \cdot 2^x$ at $x = 5$

5.33

10) $f(y) = \frac{1}{6} \cdot 2^y$ at $y = -2$

0.04

11) $f(n) = \frac{8}{3} \cdot 2^n$ at $n = 5$

85.33

12) $f(n) = \frac{3}{2} \cdot 2^n$ at $n = -3$

0.19

13) $g(n) = 8 \cdot \left(\frac{3}{9}\right)^n$ at $n = -3$

216

14) $f(y) = 5 \cdot 2^y$ at $y = 6$

320