Question8:

Determine whether the function is growth or decay.

$$y = 2\left(\frac{4}{3}\right)^x$$

A. 4 Growth because b>1	B. No Decay because b<1
C. Many Growth because b = 2	D. 10 Decay because b is a fraction

Question 9:

Write the expression in exponential form and simplify completely: $\sqrt{x^4y^8}$

A. Treating Kids Cannot be done	B. Standing Upside Down xy^2
C. Rock and Roll $\left(x^4y^8\right)^{\frac{1}{2}} = x^8y^{16}$	D. Silly Medicine $\left(x^4y^8\right)^{\frac{1}{2}} = x^2y^4$

Question 10:

Evaluate the function $y = 2(0.3)^x$ when x = 5.

A. Robin 3	B. Mrs. Happy 5.6
C. Mrs. Tired .00486	D. Shaggy 2.115

Exponential Growth and Decay Math Lib

Name_____

Fill in the Mad Lib to check your answers for the following questions.

Dear School Nurse:

(1)_____ will not be attending(2) _____ today. He has a (3)_____

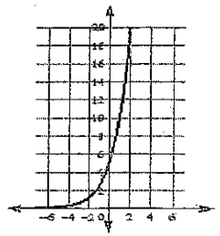
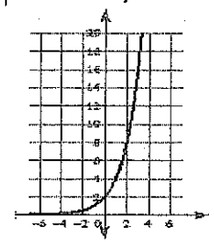
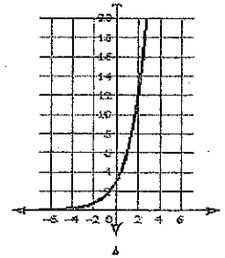
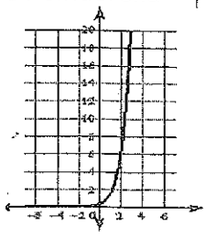
case of (4)_____ (5)_____. We have made an appointment with Dr.(6) _____

who has studied at (7)_____ and has (8)_____ degrees in (9)_____.

Sincerely,

(10)_____

Question 1: Choose the graph for the function $y = 5(2)^x$

A. Harry Potter	B. Scooby Doo	C. Batman	D. Cinderella
			

Question 2: Is the following growth or decay and why: $y = \frac{1}{3}\left(\frac{1}{2}\right)^x$

A. School It is decay because b>1.	B. Rehearsal It is growth because of the $\frac{1}{2}$ for b.
C. Tutoring It is growth because of the $\frac{1}{3}$ for b.	D. Practice It is decay because b<1.

Question 3: Evaluate the function $y = 4(2.3)^x$ when x = 3.

A. Horrible y = 27.6	B. No good y = 12.2
C. Terrible y = 48.668	D. Ridiculous y = 16.1

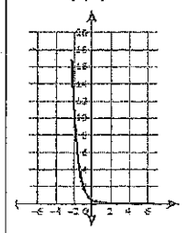
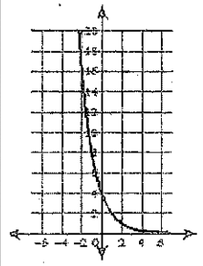
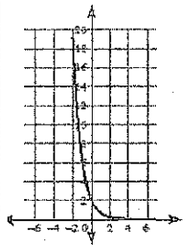
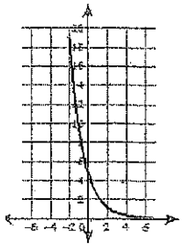
Question 4: Write in radical form: $\left(4x^3\right)^{\frac{3}{4}}$ exponent / root

A. Switched $\left(\sqrt[3]{4x^3}\right)^4$	B. Purple $\left(\sqrt[4]{4x^3}\right)^3$
C. The Plague $\left(\sqrt[4]{4}\right)^3 x^3$	D. Uncoordinated $\left(\sqrt[3]{4}\right)^4 x^3$

Question 5: Write the expression in exponential form: $\sqrt[3]{3d}$

A. Throat $(3)^{\frac{1}{3}} d$	B. Hair $(3d)^3$
C. Feet $(3d)^{\frac{1}{3}}$	D. Hands $3d^3$

Question 6: Identify the graph $y = 4\left(\frac{1}{2}\right)^x$

A. Happy	B. Upside Down	C. IDK	D. Boo
			

Question 7: Make a table for the following function: $y = 4(2)^x$

A. the mall

X	Y
-1	-4
0	0
1	8
2	16

B. the lake

X	Y
-1	7
0	8
1	9
2	10

C. the park

X	Y
-1	-8
0	-4
1	8
2	16

D. the movies

X	Y
-1	2
0	4
1	8
2	16