Circuit Training Name: _____

What is b?

Begin by completing the problem in cell #1. Search for your answer in the remaining cells. Put #2 in the problem blank: #_____. Work that question and proceed in this manner until you complete the circuit.

Find the value of the change factor, b, of the exponential function described. If necessary, round b to 3 decimal places.

<table>
<tr>
<td>Answer: 0.97
1
<table>
<tr><td>t</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td></tr>
<tr><td>P</td><td>8</td><td>12</td><td>18</td><td></td><td></td></tr>
</table>
</td>
<td>Answer: 1.06
#_____ $(2, 1714)$ & $(4, 1836)$</td>
</tr>
<tr>
<td>Answer: 1.185
#_____
<table>
<tr><td>x</td><td>y</td></tr>
<tr><td>0</td><td>3</td></tr>
<tr><td>1</td><td>6</td></tr>
<tr><td>2</td><td>12</td></tr>
<tr><td>3</td><td>24</td></tr>
<tr><td>4</td><td>48</td></tr>
</table>
</td>
<td>Answer: 1.197
#_____
<table>
<tr><td>p</td><td>R</td></tr>
<tr><td>0</td><td>405</td></tr>
<tr><td>1</td><td>135</td></tr>
<tr><td>2</td><td>45</td></tr>
<tr><td>3</td><td>15</td></tr>
<tr><td>4</td><td>5</td></tr>
</table>
</td>
</tr>
<tr>
<td>Answer: 0.984
#_____ The cost of tuition is increasing by 6% each year.</td>
<td>Answer: 2
#_____ Greenhouse gases have been rising by 0.4% each year since 1960.</td>
</tr>
<tr>
<td>Answer: 0.8
#_____ $(1, 45)$ & $(5, 0.00142)$</td>
<td>Answer: 1.5
#_____
<table>
<tr><td>x</td><td>0</td><td>1</td><td>2</td><td>3</td><td>4</td></tr>
<tr><td>Q</td><td>100</td><td>105</td><td></td><td></td><td></td></tr>
</table>
</td>
</tr>
<tr>
<td>Answer: 1/3 or 0.333
#_____ The value of the car is depreciating at a rate of 12% per year.</td>
<td>Answer: 1.1
#_____ The fish population in a local stream is decreasing by 3% each year.</td>
</tr>
</table>

Answer: 1.25

#_____ (1, 10,665) & (6, 24,920)

Answer: 1.021

#_____

t	0	1	2	3
$f(t)$	12	19.2	30.72	49.15

Answer: 0.85

#_____

t	0	1	2	3	4
C	10		6.4		

Answer: 1.004

#_____ (2, 174) & (5, 166)

Answer: 1.05

#_____ An antique car worth $32,000 and its value increases by 1.2% each year.

Answer: 1.035

#_____

n	0	1	2	3	4
B	200			266.2	

Answer: 0.88

#_____

t	0	1	2	3
$g(t)$	16	13.6	11.56	9.83

Answer: 1.012

#_____ (2, 7) & (5, 12)

Answer: 0.075

#_____ The balance in a savings account increases by 2.1% each year.

Answer: 1.6

#_____

n	0	1	2	3	4
B	40		62.5		