Unit 2 Warm Up

1. Express the equations in exponential form:

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| 1. $log\_{2}32=5$

  | 1. $log\_{3}81=4$
 |

1. Solve for x

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| 1. $3^{2a}=21$
 | 1. $9^{n+10}+3=81$
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1. In 1985, there were 285 cell phone subscribers in the small town of Centerville the number of subscribers increased by 75% per year after 1985. How many cell phone subscribers were in Centerville in 1994?
2. Write an exponential function from the table. (HINT: Use your calculator)

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| X | Y |
| 1 | 81 |
| 2 | 27 |
| 3 | 9 |
| 4 | 3 |
| 5 | 1 |

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| Domain:Range:Increase or Decrease:Asymptote:Y-intercept:End Behavior:$$x\rightarrow \infty , y\rightarrow $$$$x\rightarrow -\infty , y\rightarrow $$Translations: | $$f\left(x\right)=3\left(2\right)^{x-4}+5$$ |

1. Find the Inverse

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| 1. $h\left(x\right)=4\left(3\right)^{x+6}$
 | 1. $f\left(x\right)=log\_{7}(x-8)$
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