



# A FUZZY FAIRY TALE

## ANSWER KEY

1. (a.)  $b = 2$

(b.)  $b$  is the exponential growth factor. Since each teddy bear will double, the number is always multiplied by 2.

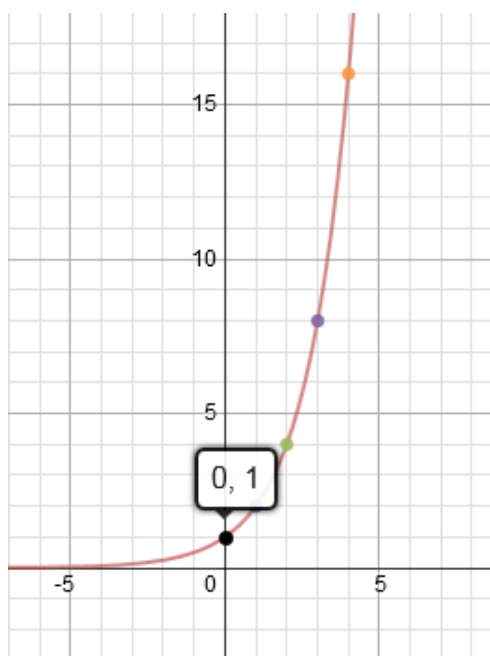
(c.)  $y = 1(2)^x$  where  $x$  is the number of days

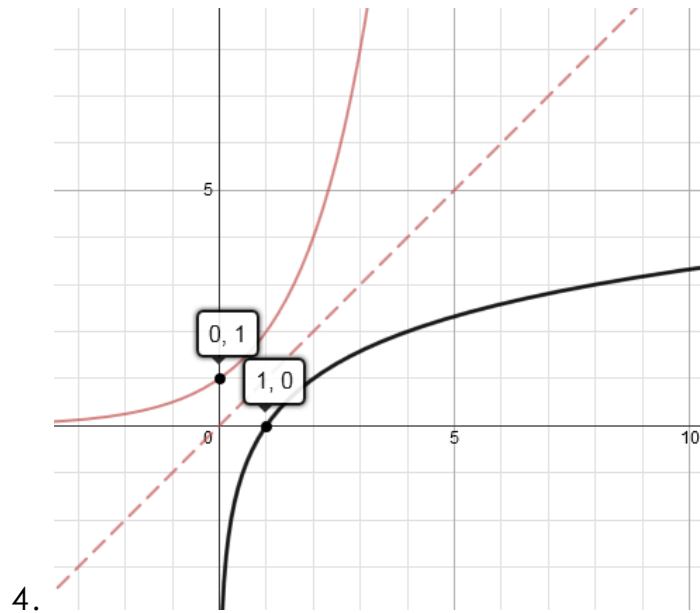
(d.)  $a$  is the initial number of bears and also the  $y$ -intercept for the function. It is the value, or number of bears, when  $x = 0$  or before they start doubling.

2.

$x$ (days)	0	1	2	3	4	5
$y$ (teddy bears)	1	2	4	8	16	32

3.



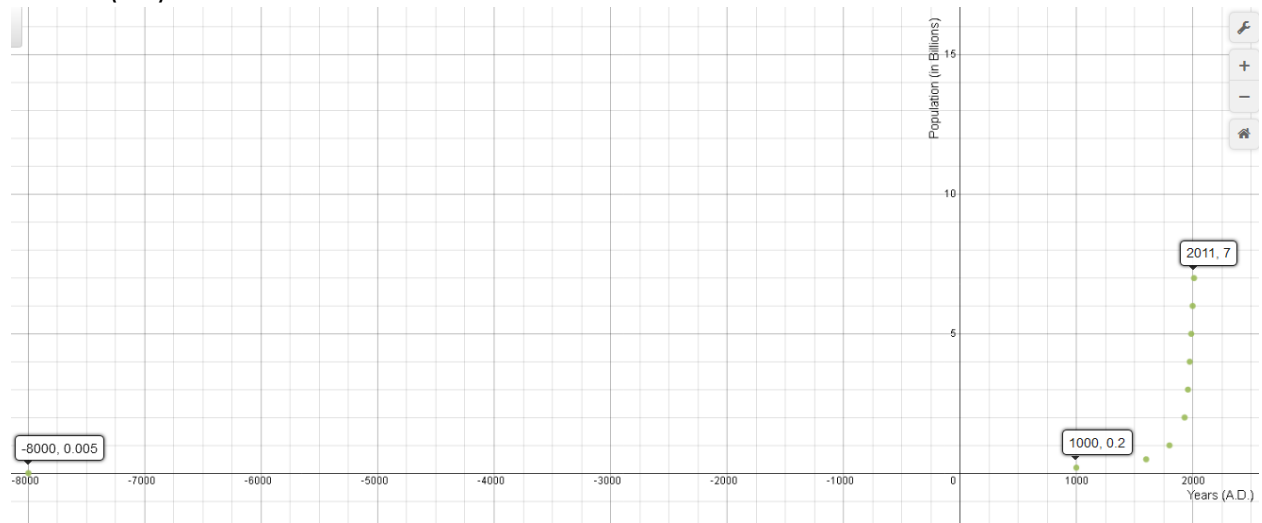


5.  $y = \log_2 x$

6. (a.) 2 more days  
 (b.) 5 days

7. 2 more days, or 30 days.

8. (a.)



(b.) Answers will vary.

## ACKNOWLEDGEMENTS

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