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Review section 2.5

HW: 2.5 #52, 22, 24, 8

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US GDP 15 (trillion \$) 1% growth

China GDP 5.3 (trillion \$) 9% growth

$U(t)$ = US GDP t years from now

$C(t)$ = China GDP t years from now

$$U(t) = 15(1.01)^t \quad C(t) = 5.3(1.09)^t$$

t	0	1	2	3
$U(t)$	15	15.15	15.3015	15.453015
		$15(1.01)$	$15.15(1.01)$	$15.3015(1.01)$
			$15(1.01)(1.01)$	$15(1.01)(1.01)(1.01)$
			$15(1.01)^2$	$15(1.01)^3$

Rule of thumb

If something grows at
 $x\%$ per year, then
it doubles about every

$$\frac{70}{x} \text{ years.}$$