

Lesson 7.1.3

7-35. Simple interest at 20%, let x = years, y = amount in the account, $y = 500 + 100x$

7-36. See below:

a. See table below. $y = 15 \cdot 5^x$

x	y
-1	3
0	15
1	75
2	375
3	1875

b. See table below. $y = 151(0.8)^x$

x	y
0	151
1	120.8
2	96.64
3	77.312
4	61.85

7-37. See below:

a. 8%, 1.08

b. $\text{cost} = 150(1.08)^8 = \277.64

c. \$55.15 (An answer of \$50.41 means a multiplier of 0.92 was used.)

7-38. See below:

a. $y = 125000(1.0625)^t$

b. \$504,052.30

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7-40. See below:

a. $(4, -1)$

b. $(-1, -2)$

c. Part (b)

d. Part (a)

7-41. $P(\text{heads}) = \frac{1}{2}$; $P(\text{tails}) = \frac{1}{2}$