

#37-40

(31)

$$\begin{array}{r}
 .05x + .1y = .65 \\
 - .05x \\
 \hline
 .1y = -.05x + .65 \\
 y = -.5x + 6.5
 \end{array}$$

↑
plug in
answer
choices

(D)

(38)

A 0.04%	$107000(1.0004) = 107042$	Increase ↓
B 0.14%	$107000(1.0014) = 107149$	
(C) 0.60%	$107000(1.0060) = 107642$	*
D 1.40%	$107000(1.0140) = 108498$	= 1498

this one shows an increase of \$642

$$\begin{array}{l}
 \text{Initial value} \\
 \downarrow \\
 V(x) = 107,000(1.009)^{\uparrow(2/3(1))} \\
 = 107,041.04 \\
 \text{increased price by } \$641.04 \\
 \uparrow \\
 \text{1 year}
 \end{array}$$

(39)

#Toppings	Cost	rate of change is
1	\$12	} +1.50 } +1.50 \$1.50
2	\$13.50	
3	\$15	
4	\$16.50	

- for 0 toppings, a pizza would cost 10.50 -
* Plug in values for answer

(A) $c(n) = 12 + 1.5n$ choices to check.

40

Chocolate chip

1.75 flour

2 eggs

\$4 profit

PB

1.25 flour

1 egg

\$2 profit

Chocolate chip makes most profit, so figure out the maximum # of chocolate chip.

Flour

$$1.75 \times [5] = 8.75 \text{ flour}$$

Eggs

$$2 \times [5] = 10 \text{ eggs}$$

5 batches chocolate chip

1.25 cups of flour + 2 eggs left, which is enough to make 1 batch of peanut butter.

(A)