

3.

$$(A) 10x + 10y = 500$$

$$(B) -1$$

$$(C) (10+1)x + 10y = 500 \rightarrow 11x + 10y = 500$$

$$(D) (10-2)x + 10y = 500 \rightarrow 8x + 10y = 500$$

$$(E) 10x + 10y = 400$$

$$(F) \begin{cases} 10(x-10) + 10y = 500, & x \geq 10 \\ 10y = 500, & x < 10 \end{cases}$$

$$(G) \begin{cases} 10x + 10y = 500, & x \leq 30 \\ 10 \times 30 + 10(x-30) + 10y = 500, & x > 30 \end{cases}$$

$$(H) \begin{cases} 10x + 10y = 500, & x \leq 30 \\ 10 \times 30 + 5(x-30) + 10y = 500, & x > 30 \end{cases}$$

4.

$$(A) 60x + 200y = 6400 - 200 \rightarrow 60x + 200y = 6200$$

$$(B) \begin{cases} 80(x-5) + 200y = 6400 - 200 = 6200, & x > 5 \\ 200y = 6200, & x \leq 5 \end{cases}$$

$$(C) \begin{cases} 80x + 200y = 6400, & x \leq 50 \\ 200y = 2400, & 50 < x \leq 55 \\ 80x + 200y = 6800, & 55 < x \end{cases}$$