

Net Cost per Credit with FAFSA

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Let c be the number of credit hours taken in a semester and r be the money rewarded by FAFSA. Then $f(c, r)$ represents the money rewarded by FAFSA per credit hour taken, $g(c)$ represents the tuition cost per credit hour taken, and $h(c, r)$ represents the net cost per credit hour taken.

$$f(c, r) = \begin{cases} r, & \text{if } c \geq 12 \\ 0.75r, & \text{if } 9 \leq c < 12 \\ 0.5r, & \text{if } 6 \leq c < 9 \\ 0, & \text{if } c < 6 \end{cases} \quad (1)$$

$$g(c) = \begin{cases} 2888.6, & \text{if } c \geq 12 \\ 240.717c, & \text{if } 1 \leq c < 12 \\ 0, & \text{if } c < 1 \end{cases} \quad (2)$$

$$h(c, r) = \begin{cases} \frac{2888.6-r}{c}, & \text{if } c \geq 12 \\ \frac{240.7176c-0.75r}{c}, & \text{if } 9 \leq c < 12 \\ \frac{240.7176c-0.5r}{c}, & \text{if } 6 \leq c < 9 \\ 240.7176, & \text{if } 1 \leq c < 6 \\ 0, & \text{if } c < 1 \end{cases} \quad (3)$$

The graph of $h(c, 1000)$ is as follows:

