

NAME: _____

1. 080227b, P.I. A2.A.23

The cost (C) of selling x calculators in a store is modeled by the equation

$$C = \frac{3,200,000}{x} + 60,000. \text{ The store profit } (P)$$

for these sales is modeled by the equation

$P = 500x$. What is the minimum number of calculators that have to be sold for profit to be greater than cost?

[4] 161, and appropriate work is shown, such
as $500x > \frac{3,200,000}{x} + 60,000$.

[3] Appropriate work is shown, but one
computational error is made or -40 is
not rejected.

[2] A correct inequality is given in standard
form, but it is not solved.

[1] An incorrect quadratic inequality of equal
difficulty is solved appropriately.

or [1] 161, but no work is shown.

[0] A zero response is completely incorrect,
irrelevant, or incoherent or is a correct
response that was obtained by an obviously

[1] incorrect procedure.