On their joint tax return, Jensen and Maureen Beck calculate their adjusted gross incomes (AGIs), separately and together. Jensen's AGI is \$249 *more than Maureen's. Their total AGI is* \$72,193. *You want to determine their individual AGIs.*

1 *Pick a useful variable for a quantity in this problem; state precisely what real number this variable stands for.*

Let m be **Maureen's AGI in dollars**.

2 *Using your variable, write down an expression for Jensen's AGI and an expression for Maureen's AGI.*

Jensen's AGI is

$$m + 249$$

dollars, while Maureen's AGI is

$$m$$

dollars.

3 *Using your variable, write down an equation that will allow you to solve the problem.*

$$(m + 249) + m = 72\,193.$$

4 *Solve your equation.*

$$\begin{aligned} 2m + 249 &= 72\,193; \\ 2m &= 71\,944; \\ m &= 35\,972. \end{aligned}$$

5 *State a complete answer to the problem: What is Jensen's AGI, and what is Maureen's AGI?*

Since $35\,972 + 249 = 36\,221$, Jensen's AGI is

\$36,221;

and Maureen's AGI is

\$35,972.