Average

① Three homes on Lavendar Lane sold for an average price of $89,000. Two of the homes sold for $95,000 each. What is the price of the third home?

① Let x = price of 3rd home

② Set up average:

$$\frac{95000 + 95000 + x}{3} = 89,000$$

③ Solve: $\frac{190000 + x}{3} = 89,000$

$$\frac{(3)}{(1)} \cdot \frac{19000}{3} + x = 89000 \cdot 3$$

$$\begin{array}{r} 190000 + x = 267000 \\ -190000 \quad\quad -190\,000 \end{array}$$

$$x = 77000$$

② The 7th grade Red Cluster averaged 32 items per advisory for the Food Cupboard! Mr. Bowles' advisory had 40 items, Mrs. Taskers' had 28, Mrs. Cole had 26, Mr. Gavaghan had 33. How many did the Gumas advisory have to have to keep the 32 item average?

① Let x = Gumas # food

② set up average:

$$\frac{40 + 28 + 26 + 33 + x}{5} = 32$$

$$\cancel{5} \cdot \frac{127 + x}{\cancel{5}} = 32 \times 5$$

$$\begin{array}{r} 127 + x = 160 \\ -127 \quad\quad -127 \\ \hline x = 33 \text{ items} \end{array}$$