21 Gloria manages an apartment building. The building has only two sizes of apartments: small and large. The table below shows the rental income per month for each apartment size.

> Apartment Rental Income

| Apartment Size | Rental Income per Month |
| :---: | :---: |
| small | $\$ 800$ |
| large | $\$ 1200$ |

a. What is the total rental income for one month when 3 small apartments and 4 large apartments are rented? Show or explain how you got your answer.

For parts (b), (c), and (d), define $x$ and $y$ as follows:

- $x=$ the number of small apartments in the building
- $y=$ the number of large apartments in the building
b. Last month all the apartments in the building were rented. The total rental income for the month was $\$ 17,600$. Write an equation in terms of $x$ and $y$ that represents this information.
c. The total number of small apartments and large apartments is 18 . Write an equation in terms of $x$ and $y$ that represents this information.
d. Using the information in parts (b) and (c), determine the following:
- the number of small apartments in the building
- the number of large apartments in the building

Show or explain how you got each of your answers.

