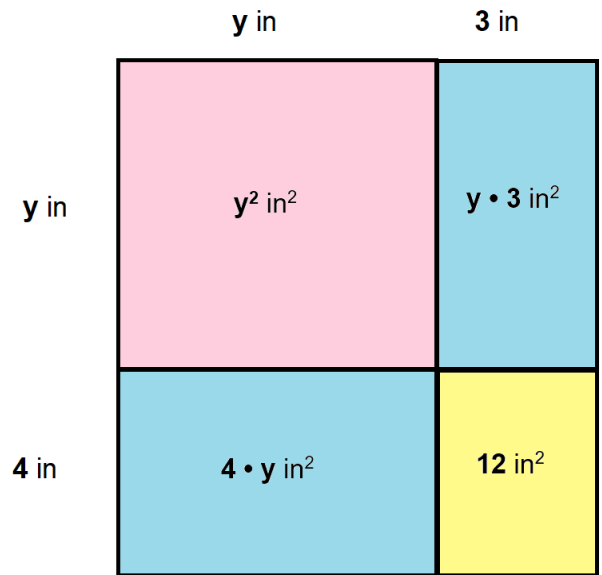


Alexa created a drawing to show the area of Noah's rectangle of fabric. Each side of Zara's square of fabric is y inches.

Alexa also wrote the following equation to represent the area of Noah's rectangle of fabric

$$(y + 4) \cdot (y + 3) = y^2 + (4 \cdot y) + (y \cdot 3) + 12$$



1. Mauricio and Emily wrote the following equation to express two areas of Noah's rectangle:

$$y(y + 4) = y^2 + 4 \cdot y$$

Explain in your own words how *distributing* gives two areas of Noah's rectangle.



2. Mauricio and Emily wrote the following equation to express the two remaining areas of Noah’s rectangle:

$$3(y + 4) = 3 \cdot y + 4 \cdot 3$$

Explain in your own words how *distributing* gives the two other areas of Noah’s rectangle.

3. **Draw arrows** on Alexa’s equation that shows how Emily and Mauricio distributed on the left side of the equation to get areas on the right side of the equation.

$$(y + 4) \cdot (y + 3) = y^2 + (4 \cdot y) + (y \cdot 3) + 12$$



4. **Explain** in your own words how *distributing twice* gives all four areas of Noah's rectangle.

