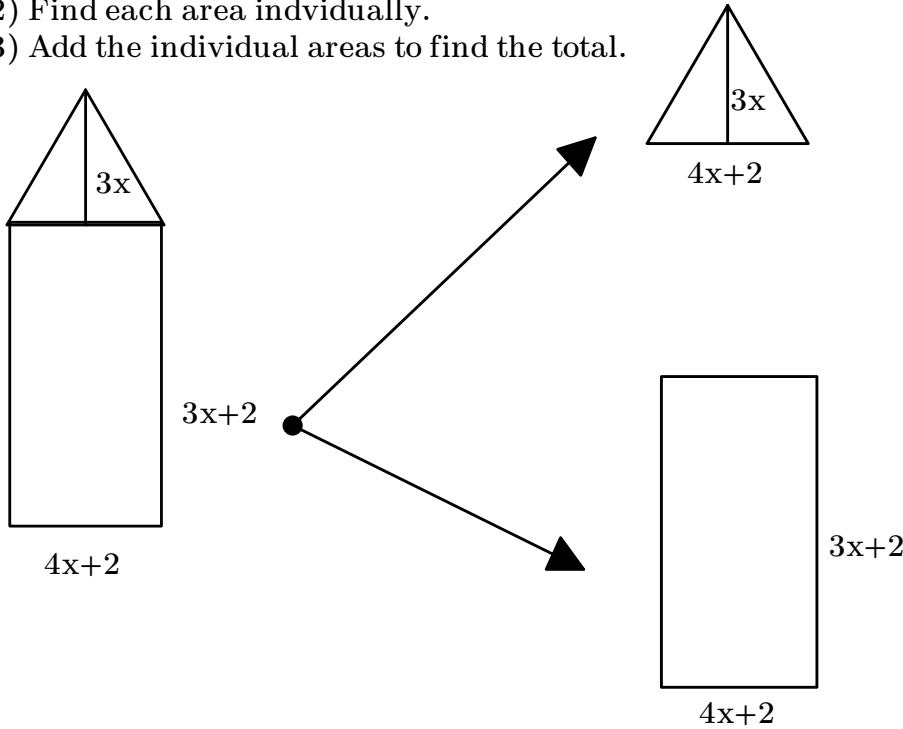


- 1) Break the figure into two simpler figures.
- 2) Find each area individually.
- 3) Add the individual areas to find the total.



$$\begin{aligned}
 \text{Area} &= \frac{1}{2} \times \text{Base} \times \text{Height} \\
 &= \frac{1}{2}(4x+2)(3x) \\
 &= \left(\frac{4}{2}x + \frac{2}{2}\right)(3x) \\
 &= (2x+1)(3x) \\
 &= 2x \cdot 3x + 1 \cdot 3x \\
 &= 6x^2 + 3x
 \end{aligned}$$

$$\begin{aligned}
 \text{Area} &= (4x+2)(3x+2) \\
 &= (4x)(3x) + (4x)(2) + (2)(3x) + (2)(2) \\
 &= 12x^2 + 8x + 6x + 4 \\
 &= 12x^2 + 14x + 4
 \end{aligned}$$

Total Area = Area of Triangle + Area of Rectangle

$$\begin{aligned}
 &= (6x^2 + 3x) + (12x^2 + 14x + 4) \\
 &= 6x^2 + 12x^2 + 3x + 14x + 4 \\
 &= 18x^2 + 17x + 4
 \end{aligned}$$

rearrange
combine like terms