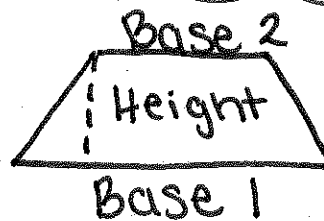
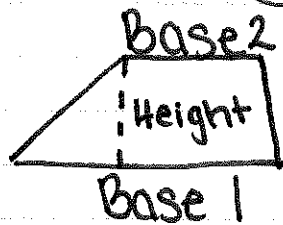


Area of Trapezoids



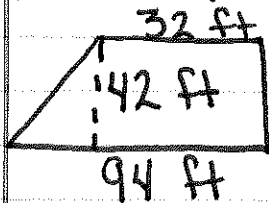
Formula

PEMDAS

$$\text{Area} = \frac{1}{2} \times \text{Height} \times (\text{Base 1} + \text{Base 2})$$

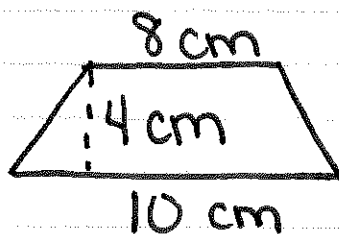
$$A = \frac{1}{2} H (B_1 + B_2)$$

Examples



$$\begin{aligned} A &= \frac{1}{2} H (B_1 + B_2) \\ &= \frac{1}{2} \times 42 \times (94 + 32) \\ &= \frac{1}{2} \times 42 \times 126 \\ &= 21 \times 126 \\ &= 2,646 \text{ ft}^2 \end{aligned}$$

$$\begin{array}{r} 94 \\ + 32 \\ \hline 126 \\ \times 21 \\ \hline 126 \\ + 2520 \\ \hline 2646 \end{array}$$



$$\begin{aligned} A &= \frac{1}{2} H (B_1 + B_2) \\ &= \frac{1}{2} \times 4 \times (10 + 8) \\ &= \frac{1}{2} \times 4 \times 18 \\ &= 2 \times 18 \\ &= 36 \text{ cm}^2 \end{aligned}$$