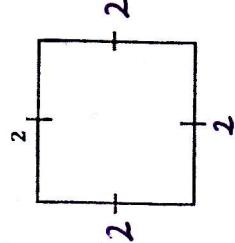


## NOTES: AREA DAY 1

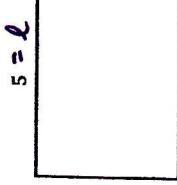
EXAMPLES: Find the indicated measures.

$$A_{\text{SQUARE}} = (\text{Side Length})^2$$



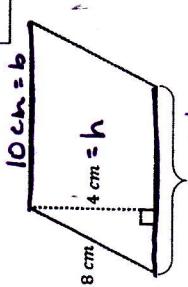
$$\begin{aligned} A &= s^2 \\ A &= (2)^2 \\ A &= 4 \end{aligned}$$

$$A_{\text{RECTANGLE}} = (\text{length})(\text{width})$$



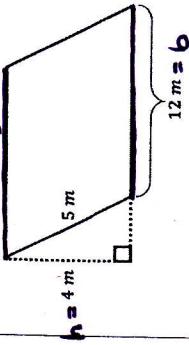
$$\begin{aligned} A &= \ell w \\ A &= 5(4) \\ A &= 20 \end{aligned}$$

$$A_{\text{PARALLELOGRAM}} = (\text{base})(\text{height})$$



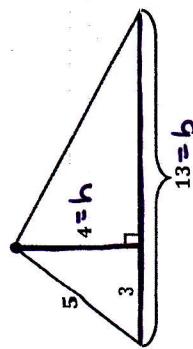
$$\begin{aligned} A &= bh \\ A &= 10(4) \\ A &= 40 \end{aligned}$$

$$\begin{aligned} A &= bh \\ A &= 12(4) \\ A &= 48 \end{aligned}$$



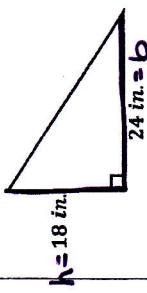
$$A_{\text{TRIANGLE}} = \frac{1}{2}(\text{base})(\text{height})$$

$$\begin{aligned} A &= \frac{1}{2}bh \\ A &= \frac{1}{2}(13)(4) \\ A &= 2(13) \\ A &= 26 \end{aligned}$$



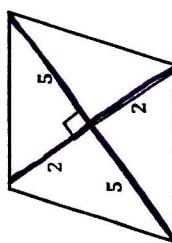
$$\begin{aligned} Base &= 13 \\ Height &= 4 \\ Area &= 26 \end{aligned}$$

$$\begin{aligned} A &= \frac{1}{2}bh \\ A &= \frac{1}{2}(24)(18) \\ A &= 12(18) \\ A &= 216 \end{aligned}$$



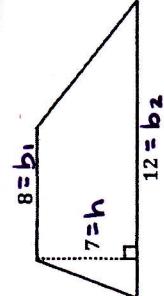
$$A_{\text{RHOMBUS}} = \frac{1}{2}(\text{diagonal}_1)(\text{diagonal}_2)$$

$$\begin{aligned} A &= \frac{1}{2}(d_1)(d_2) \\ A &= \frac{1}{2}(4)(10) \\ A &= 2(10) \\ A &= 20 \end{aligned}$$



$$A_{\text{TRAPEZOID}} = \frac{1}{2}h(b_1 + b_2)$$

$$\begin{aligned} Base &= 24 \text{ in} \\ Height &= 18 \text{ in} \\ Area &= 216 \text{ in}^2 \end{aligned}$$



$$\begin{aligned} b_1 &= 8 \\ b_2 &= 12 \\ Height &= 10 \\ Area &= 70 \end{aligned}$$