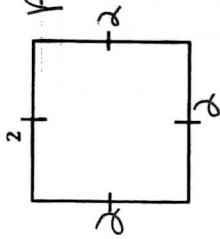


NOTES: AREA DAY 1

EXAMPLES: Find the indicated measures.

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

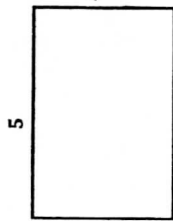
$A = 2^2 = 4$



Length = $\frac{2}{2}$
 Width = $\frac{2}{2}$
 Area = $\frac{4}{4} u^2$

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

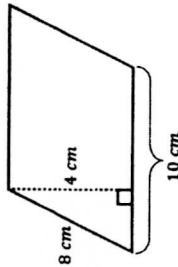
$A = LW$
 $= 5(4)$
 $= 20$



Length = $\frac{5}{4}$
 Width = $\frac{4}{4}$
 Area = $\frac{20}{4} u^2$

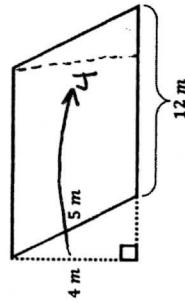
$A_{\text{PARALLELOGRAM}} = (\text{base})(\text{height})$

~~$A = bh$~~ * Don't use 8!
 $A = 10(4)$
 $= 40$



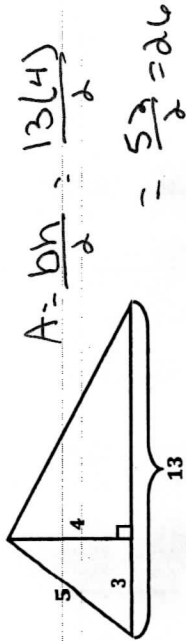
Base = $\frac{10}{4}$
 Height = $\frac{4}{4}$
 Area = $\frac{40}{4} cm^2$

$A = bh$
 $= 12(4)$
 $= 48$



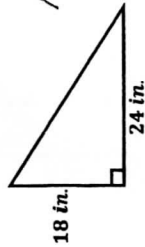
Base = $\frac{12}{4}$
 Height = $\frac{4}{4}$
 Area = $\frac{48}{4} m^2$

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

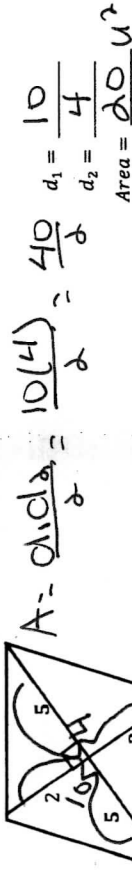


Base = $\frac{13}{4}$
 Height = $\frac{4}{26} u^2$
 Area = $\frac{26}{26} u^2$

$A = \frac{bh}{2} = \frac{24(18)}{2} = 216$
 Base = $\frac{24}{18}$
 Height = $\frac{18}{216} u^2$
 Area = $\frac{216}{216} u^2$



$A_{\text{RHOMBUS}} = \frac{1}{2}(\text{diagonal1})(\text{diagonal2})$



$A = \frac{d_1 d_2}{2} = \frac{10(4)}{2} = \frac{40}{2}$
 $d_1 = \frac{10}{4}$
 $d_2 = \frac{4}{20} u^2$
 Area = $\frac{20}{20} u^2$

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



$b_1 = \frac{8}{12}$
 $b_2 = \frac{12}{70}$
 Height = $\frac{7}{70} u^2$
 Area = $\frac{70}{70} u^2$

$A = \frac{(b_1 + b_2)h}{2}$
 $= \frac{(8 + 12)7}{2} = \frac{140}{2}$