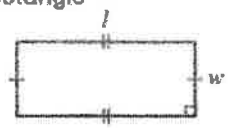
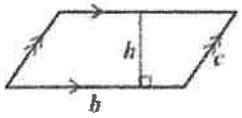
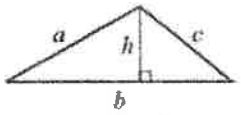
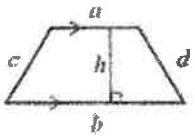
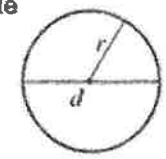
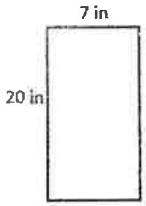
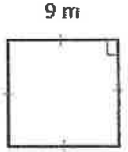
Area Formulas

Geometric Shape	Area
Rectangle 	$A = lw$
Parallelogram 	$A = bh$
Triangle 	$A = \frac{bh}{2}$ or $A = \frac{1}{2}bh$
Trapezoid 	$A = \frac{(a+b)h}{2}$ or $A = \frac{1}{2}(a+b)h$
Circle 	$A = \pi r^2$

Note: This includes squares, for which the length and width are the same.

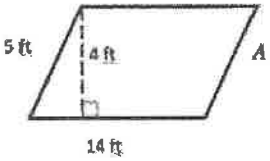


$A = 7 \times 20 = 81\ m^2$



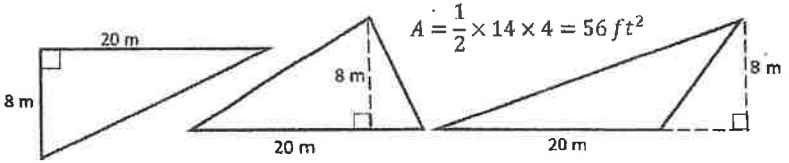
$A = 9 \times 9 = 81\ m^2$

Note: The base doesn't have to be the bottom, but it does have to be perpendicular (make a right angle) with the altitude (height).



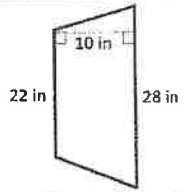
$A = 4 \times 14 = 56\ ft^2$

Note: Like the parallelogram, the base doesn't have to be the bottom, but it does have to be perpendicular (make a right angle) with the altitude (height).



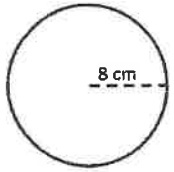
$A = \frac{1}{2} \times 14 \times 4 = 56\ ft^2$

Note: The two bases (a and b) of a trapezoid are the two parallel sides, not necessarily the top and bottom.



$A = \frac{1}{2}(22 + 28) \cdot 10 = \frac{1}{2}(40)(10) = 200\ in^2$

Note: Pi (π) is about 3.14. We will often use the symbol π much like the way we use square roots in simplest radical form.



$A = \pi \cdot 8^2 = 64\pi \approx 200.96\ cm^2$