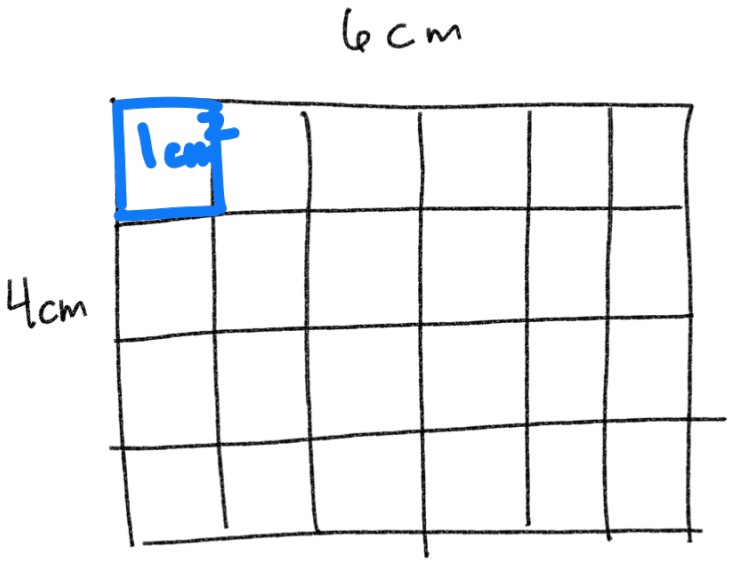
M-G Geometry Week 29 5/1



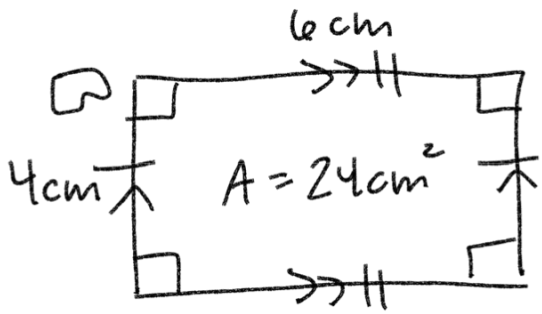
Area = base * height

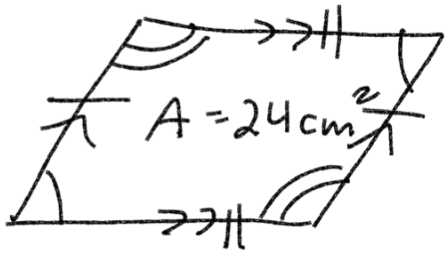
$A = bh$

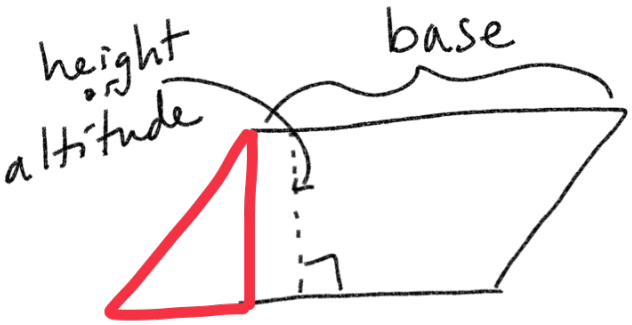
$A = (6\text{ cm})(4\text{ cm})$

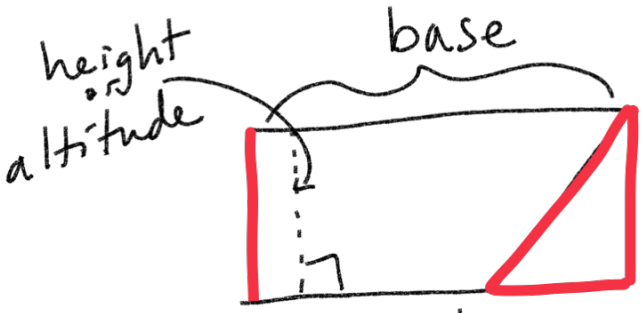
24 cm^2

24 square centimeters

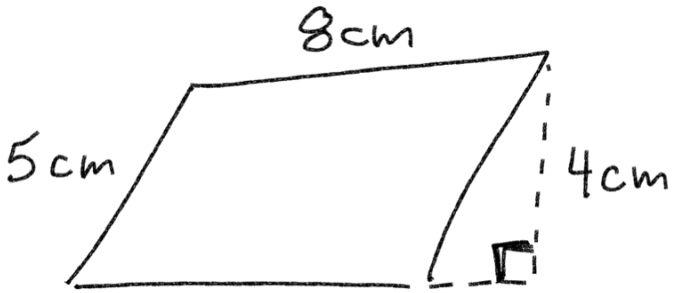








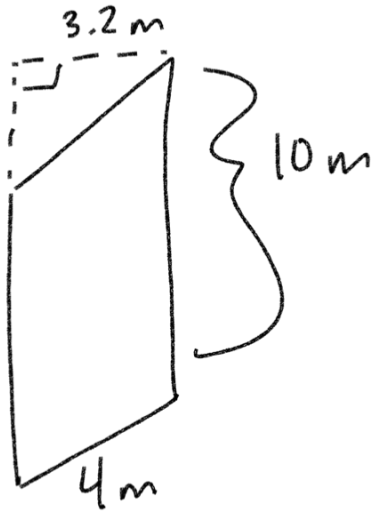
Area = base * height (altitude)



$A = bh$

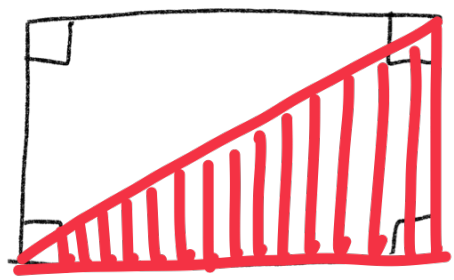
$(8\text{cm})(4\text{cm})$

32 cm^2



$A = bh = (10m)(3.2m)$

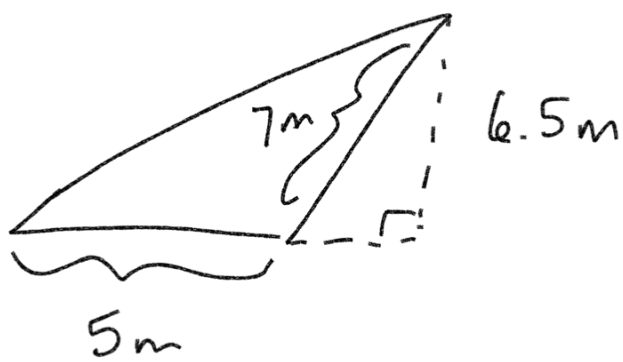
$\boxed{32\ m^2}$



if a triangle is $\frac{1}{2}$ of a rectangle, its area is $\frac{1}{2}bh$

Area of Rectangle : bh

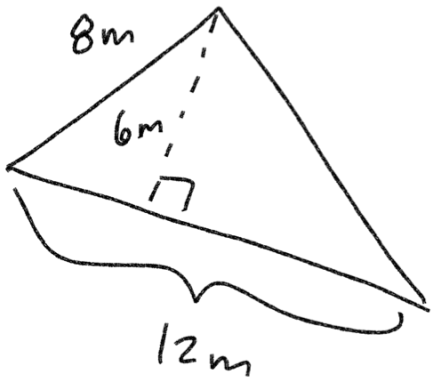
Area of Triangle : $\frac{1}{2}bh$



Area $= \frac{1}{2}bh$

$\frac{1}{2}(5m)(6.5m) = \boxed{16.25\ m^2}$

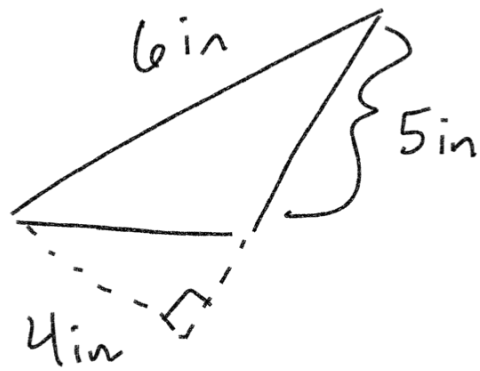
1.)



$A = \frac{1}{2}bh$

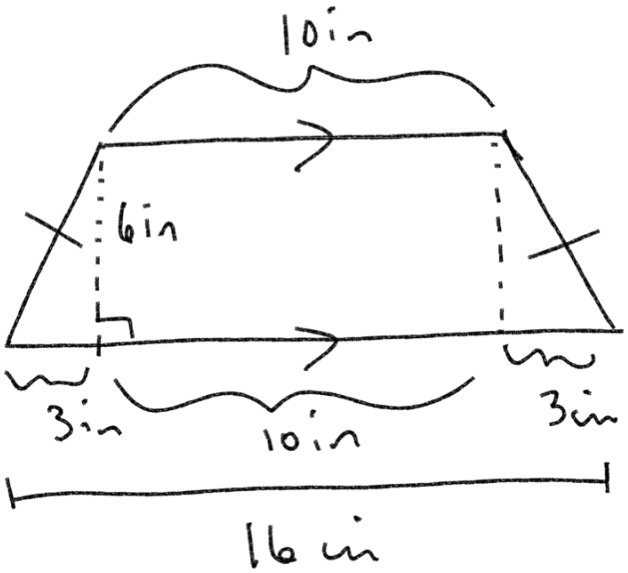
$\frac{1}{2}(12m)(6m) = \boxed{36m^2}$

2.)



$A = \frac{1}{2}bh$

$\frac{1}{2}(5in)(4in) = \boxed{10in^2}$



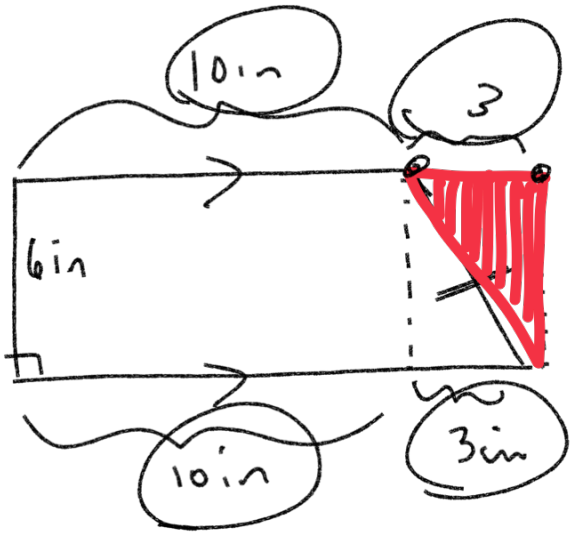
Area of Trapezoid

$A = \left(\frac{b_1 + b_2}{2}\right)h$

$A = \left(\frac{10in + 16in}{2}\right)(6in)$

$\left(\frac{26}{2}\right)(6)$

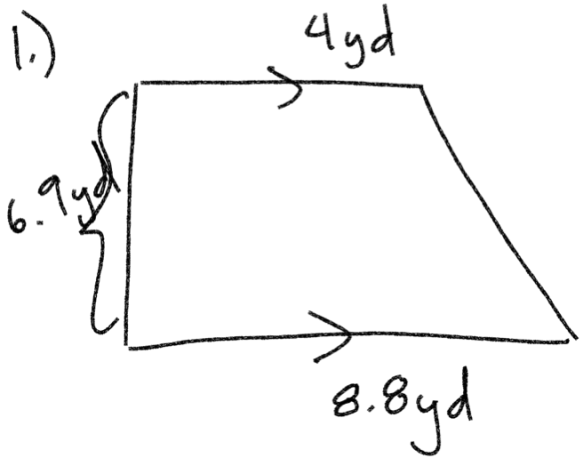
$(13)(6) = \boxed{78in^2}$



$A = bh$

$(13in)(6in) = \boxed{78in^2}$

1.)



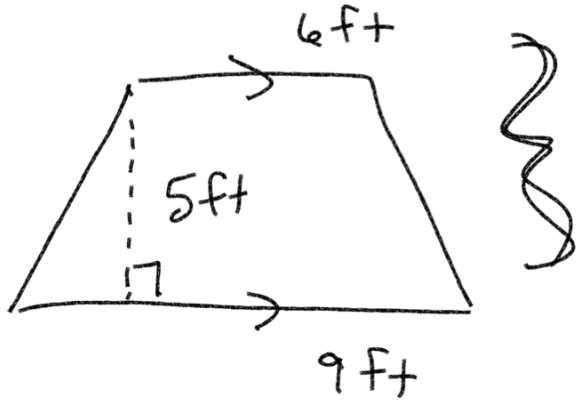
$$\boxed{A = \frac{1}{2}(b_1 + b_2)(h)}$$

$$\frac{1}{2}(4\text{yd} + 8.8\text{yd})(6.9\text{yds})$$

$$\frac{1}{2}(12.8\text{yd})(6.9\text{yds})$$

$$\boxed{44.16\ \text{yd}^2}$$

2.)



$$A = \frac{1}{2}(b_1 + b_2)(h)$$

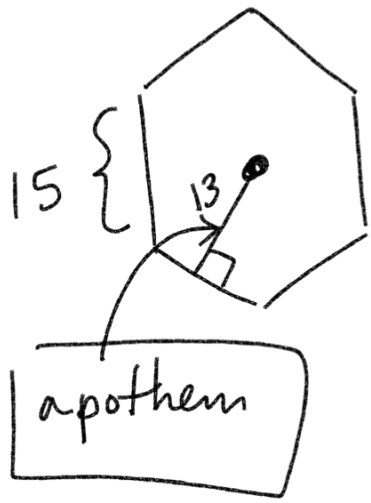
$$\frac{1}{2}(6\text{ft} + 9\text{ft})(5\text{ft})$$

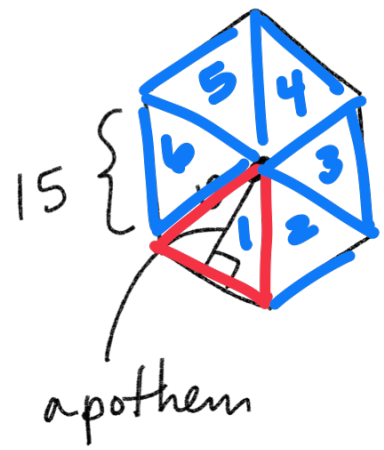
$$\frac{1}{2}(15\text{ft})(5\text{ft})$$

$$\boxed{37.5\ \text{ft}^2}$$

Regular Polygon

↳ all sides equal





$97.5 * 6$

$\boxed{585 \text{ units}^2}$

Area of Triangle : $\frac{1}{2}bh$

$\frac{1}{2}(15)(13) =$

97.5 units^2

Area of Regular Polygon

$\frac{1}{2}(\text{perimeter})(\text{apothem})$

$\frac{1}{2}(15 * 6)(13) = \boxed{585 \text{ units}^2}$

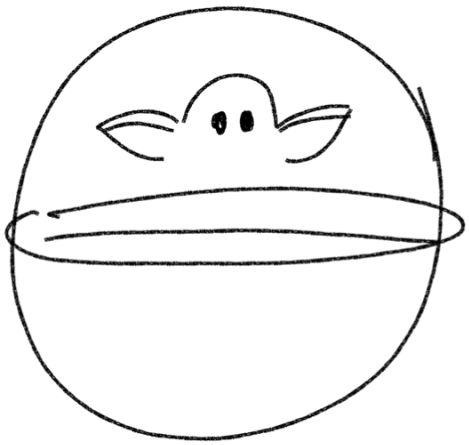
$A = \frac{1}{2}(\text{perimeter})(\text{apothem})$

$\frac{1}{2}(30.5 * 5)(21) =$

$\boxed{1601.25 \text{ units}^2}$

Volume of Sphere

$$V = \frac{4}{3}\pi r^3 \qquad V = \frac{4}{3}\pi\left(\frac{d}{2}\right)^3$$



$d = 22\,m$

$$V = \frac{4}{3}\pi\left(\frac{22m}{2}\right)^3$$

$$\frac{4}{3}\pi(11m)^3$$

$$\boxed{5575\,m^3}$$