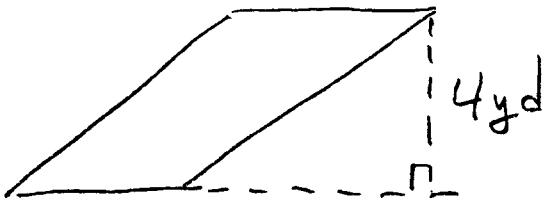
Geometry 5-20-13 Monday Class Notes

(144)



$A = ?$

$A = 4(8.7)$

$A = 34.8\ yd^2$

$A = bh$

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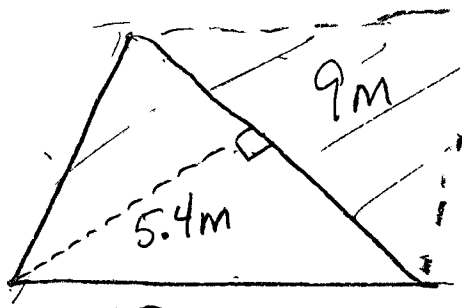


$A = ?$

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

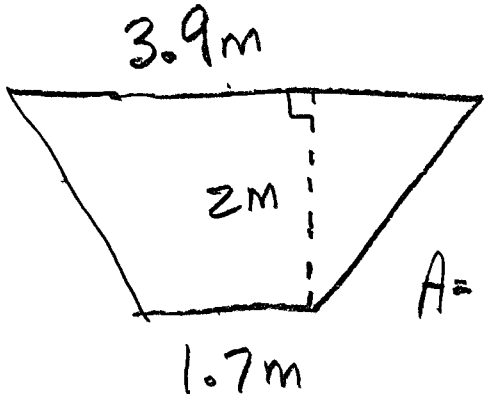
$A = \frac{1}{2}(5.4)(9)$

$A = (4.5)(5.4)$

$A = 24.3\ m^2$

$$\begin{array}{r} 5.4 \\ \times\ 4.5 \\ \hline 270 \\ 216 \\ \hline 24.30 \end{array}$$

(146)



$A = ?$

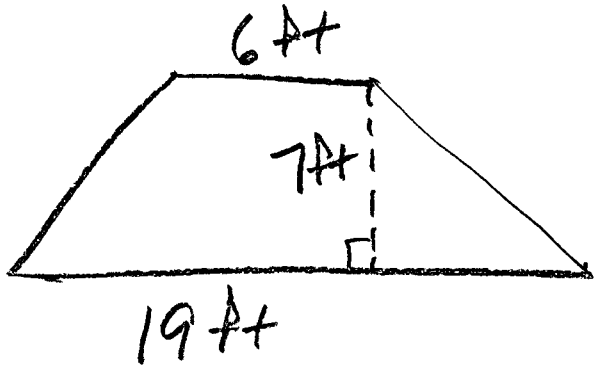
$A = \frac{1}{2}(b_1 + b_2)h$

$A = \frac{1}{2}(3.9 + 1.7)2$

$A = \frac{1}{2}(5.6)2$

$A = 5.6\ m^2$

Ex



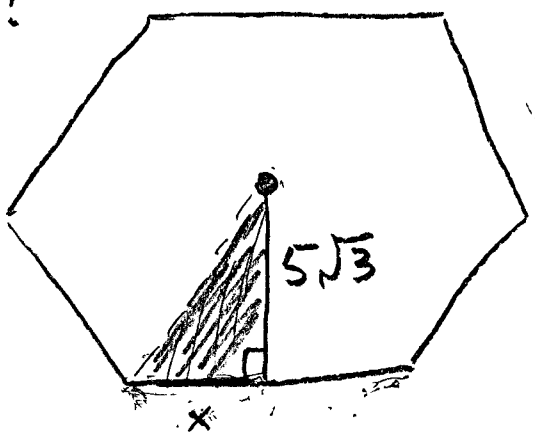
$A = \frac{1}{2}(6 + 19)7$

$= \frac{1}{2}(25)7$

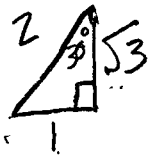
$= \frac{1}{2}(175)$

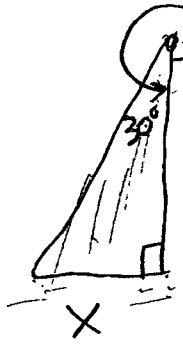
$A = 87.5\ ft^2$

(156) $A = ?$



Assume a Regular polygon





$\frac{360°}{12 \text{ Angles}} = 30°$ per Angle

$$A = \frac{1}{2} a P$$

$$X = \frac{5\sqrt{3}}{\sqrt{3}} = 5 \quad \therefore P = 60$$

$$A = \frac{1}{2} a P = \frac{1}{2}(5\sqrt{3})60$$

$$A = 150\sqrt{3} \text{ units}^2$$

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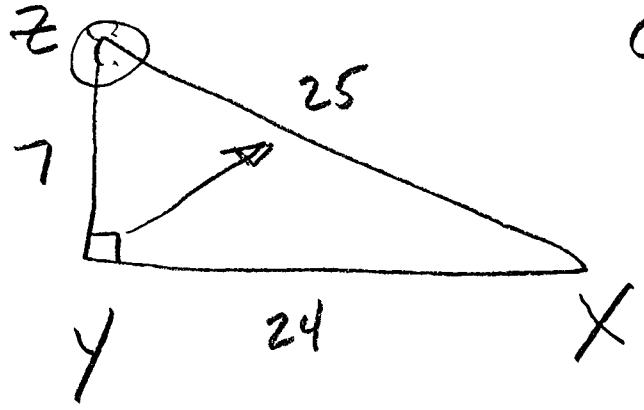

$\cos Z = ?$

SOH CAH TOA

$$\cos Z = \frac{7}{25}$$

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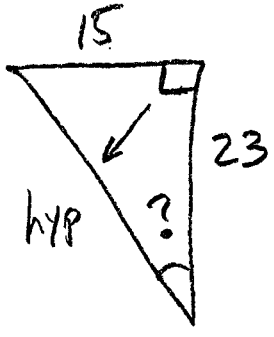

SOH CAH TOA

$$\tan X = \frac{15}{23}$$

$$\tan^{-1}\left(\frac{15}{23}\right) = X$$

$$\tan^{-1}(.652) = X$$

$$33^\circ \approx X$$

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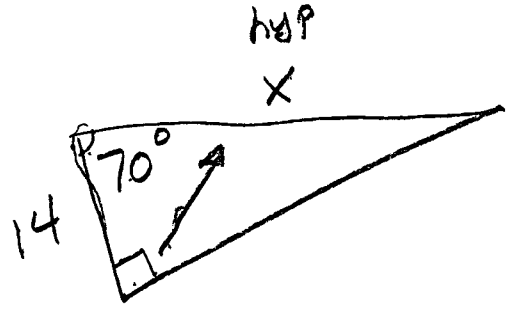


$X = ?$

SOH CAH ~~TOA~~

$$X \cos 70^\circ = \frac{a}{h} = \frac{14}{X} \cdot X$$

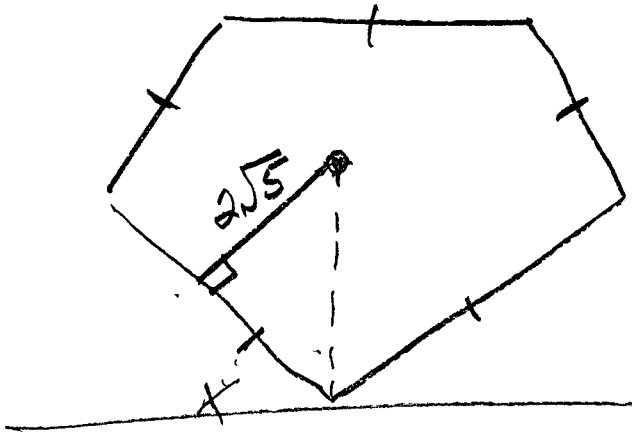
$$\frac{X \cos 70^\circ}{\cos 70^\circ} = \frac{14}{\cos 70^\circ}$$

$$X = \frac{14}{(.3420)}$$

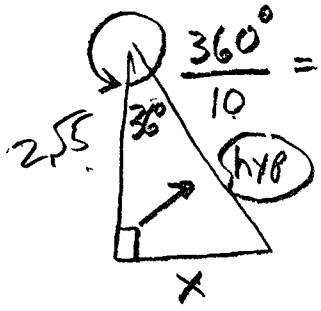
$$X = 40.9357$$

$$\boxed{X = 40.9 \text{ units}}$$

(3) Ex



$A = ?$



$$\tan 36° = \frac{o}{a} = \frac{x}{2\sqrt{5}}$$

$$2\sqrt{5}\tan 36° = x$$

$$(2\sqrt{5})(.7265) = x$$

$$1.4531\sqrt{5} = x$$

$\therefore P = 10(1.4531\sqrt{5}) = 14.531\sqrt{5}$

$$A = \frac{1}{2}(2\sqrt{5})(14.531\sqrt{5})$$

$$A = 5(14.531) = 72.65$$

$A = 72.7 \text{ units}^2$