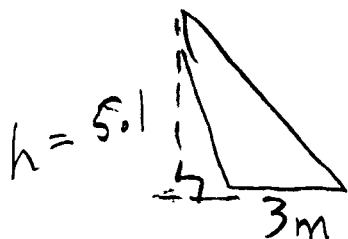


$$\textcircled{1} \quad A_{\Delta} = \frac{1}{2}bh = \frac{1}{2}(3)(5.1)$$



$$= (1.5)(5.1) = 7.65$$

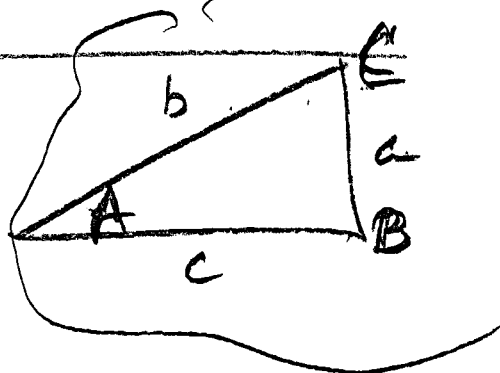
$$\begin{array}{r} 5.1 \\ 1.5 \\ \hline 255 \\ 51 \\ \hline 765 \end{array}$$

$$A \approx 7.7 m^2$$

$$\textcircled{\text{ex}} \quad A_{\Delta} = \frac{1}{2}ab \sin C$$

$$A_{\Delta} = \frac{1}{2}ac \sin B$$

$$A_{\Delta} = \frac{1}{2}bc \sin A$$



$$\textcircled{3} \quad r = 9 \text{ cm}$$

$$A_{\odot} = \pi r^2$$

$$A_{\odot} = \pi(9)^2$$

$$A_{\odot} = 81\pi \text{ cm}^2$$

$$\textcircled{\text{ex}} \quad C = 2\pi r$$

$$C = 2\pi(9)$$

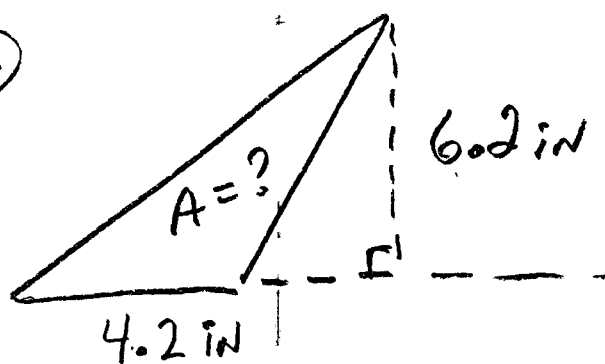
$$C = 18\pi \text{ cm}$$

Monday 12-17-12

CLASS NOTES

Geometry

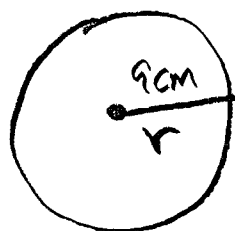
(Ex)



$$\begin{array}{r} 62 \\ \times 42 \\ \hline 124 \\ 248 \\ \hline 2604 \end{array}$$

$$\frac{1}{2} \cdot 26.04 = \boxed{13.02 \text{ in}^2}$$

(3) radius = 9 cm Area = ?
EXACT



$$A = \pi r^2$$

$$A = \pi (9)^2 = \boxed{81\pi \text{ cm}^2}$$

(8) (9, 3), (-8, -8) Midpoint?

$$\left(\frac{9 + -8}{2}, \frac{3 + -8}{2} \right) = \boxed{\left(\frac{1}{2}, -\frac{5}{2} \right)}$$

$\Downarrow$
 $-2\frac{1}{2}$

⑤ radius = 8 km $C = ?$ EXACT

$$C = 2\pi r$$

$$C = 16\pi \text{ km}$$

Ex $A = \pi r^2 = 64\pi \text{ km}^2$

⑨ $(6, 7), (-1, 3)$

$$\left(\frac{6+(-1)}{2}, \frac{7+3}{2}\right) = \left(\frac{5}{2}, 5\right)$$

or $(2\frac{1}{2}, 5)$

Ex $(6, 7), (-1, 3)$

d^2
run² rise²

$$(3-7)^2 + (-1-6)^2 = d^2 \quad d = \sqrt{(x_2-x_1)^2 + (y_2-y_1)^2}$$

$$(-4)^2 + (-7)^2 = d^2$$

$$16 + 49 = d^2$$

$$65 = d^2$$

$$\sqrt{65} = d$$

$\alpha \beta \gamma \Delta \zeta \eta \theta \pi \rho \phi$

The Greek Alphabet

alpha

beta

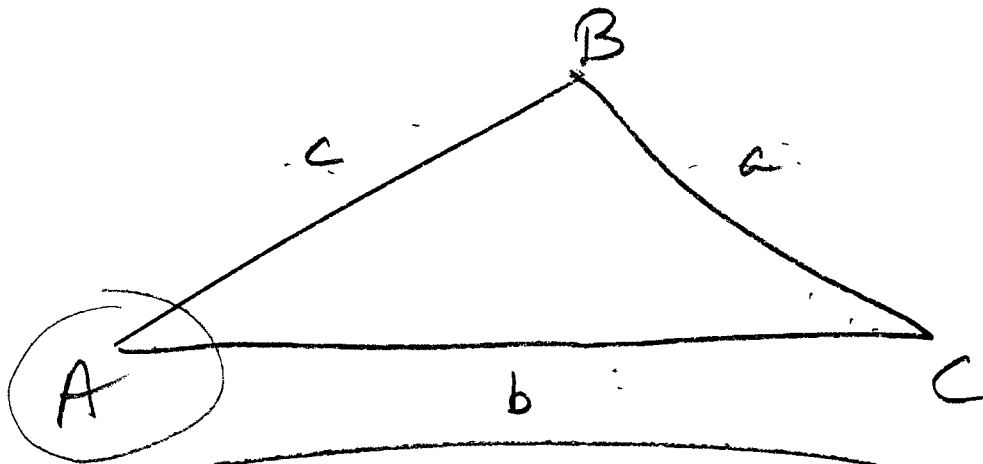
gamma

delta

zeta

theta

pi... etc



$$A_{\Delta} = \frac{1}{2} bc \sin A$$

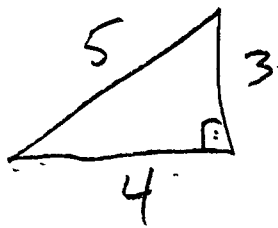
$$A_{\Delta} = \frac{1}{2} ac \sin B$$

$$A_{\Delta} = \frac{1}{2} ab \sin C$$

Area

$$\frac{\frac{1}{2} bc \sin A}{\frac{1}{2} abc} = \frac{\frac{1}{2} ac \sin B}{\frac{1}{2} abc} = \frac{\frac{1}{2} ab \sin C}{\frac{1}{2} abc}$$

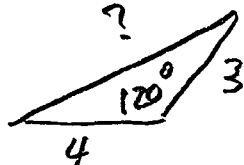
$$\left\{ \frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c} \right\} \text{LOS}$$



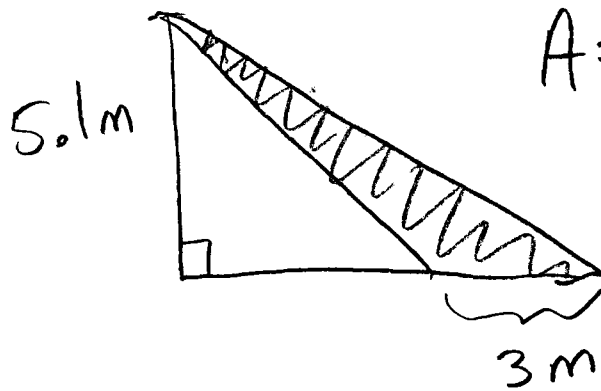
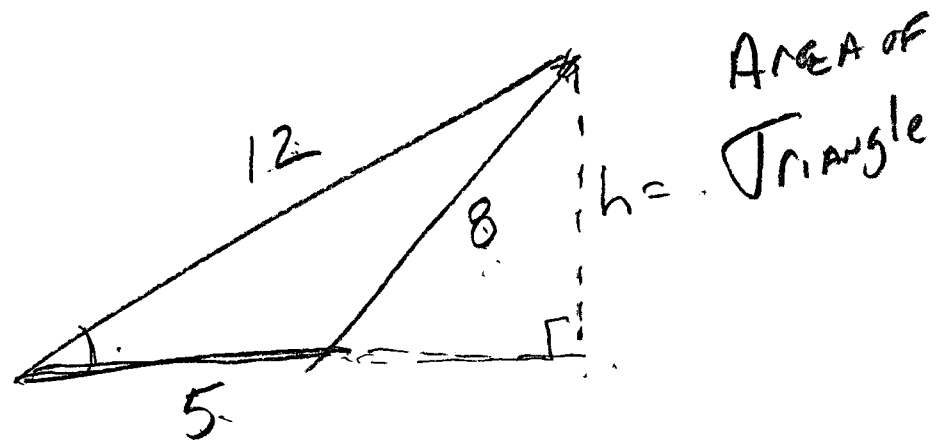
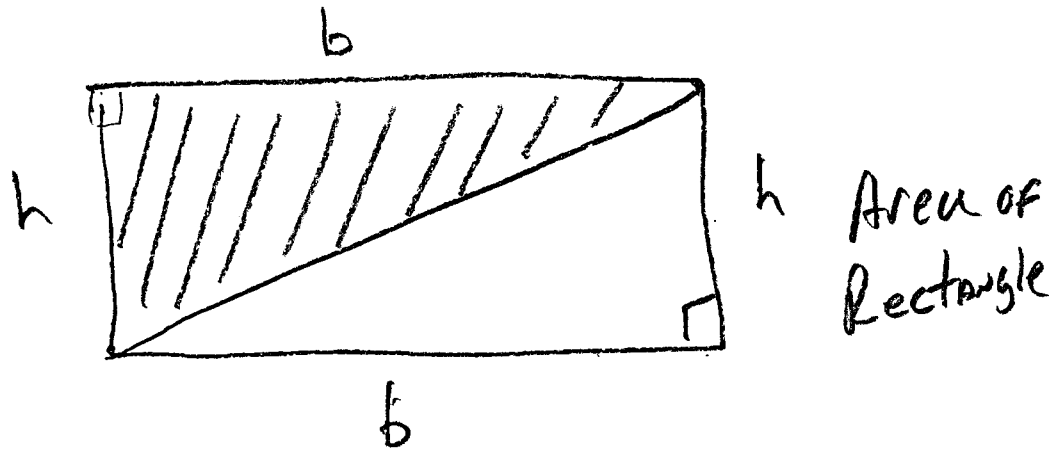
$$A_{\Delta} = \frac{1}{2} bh = \frac{1}{2}(4)(3) = 6 \text{ units}^2$$

$$A_{\Delta} = \frac{1}{2}(3)(4) \sin 90^{\circ} = 6 \text{ units}^2$$

(Ex)



$$A_{\Delta} = \frac{1}{2}(3)(4) \sin 120^{\circ} = \frac{6\sqrt{3}}{2} = \boxed{3\sqrt{3}} \text{ units}^2$$



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

$$= \frac{1}{2}(3)(5.1)$$

$$= \frac{1}{2}(15.3)$$

$$= 7.65 \text{ m}^2$$

6

⑦ $(-9, 0), (-2, 3)$ mid?

$$\left(\frac{-9-2}{2}, \frac{0+3}{2} \right)$$

$$\boxed{\left(-\frac{11}{2}, \frac{3}{2} \right)} \underline{\underline{\text{or}}} (-5.5, 1.5)$$

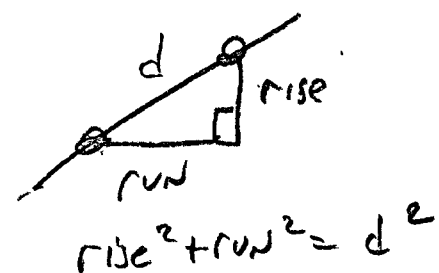
⑧ $(-12, 5), (-5, 8)$

$$\left(-\frac{17}{2}, \frac{13}{2} \right)$$

⑪ $(-1, 3), (-2, -5)$

Rise

Run



$$(-5-3)^2 + (-2+1)^2 = d^2$$

$$(-8)^2 + (-1)^2 = d^2$$

$$64 + 1 = d^2$$

$$65 = d^2$$

$$\boxed{\sqrt{65} = d}$$

⑬ $(-8, -6), (-5, 4) = \sqrt{109}$

$$\textcircled{17} \quad \overbrace{9x+9}^{-9x} = \overbrace{11x-9}^{-9x}$$

$$\begin{array}{r} 9 = 2x - 9 \\ +9 \quad \quad +9 \end{array}$$

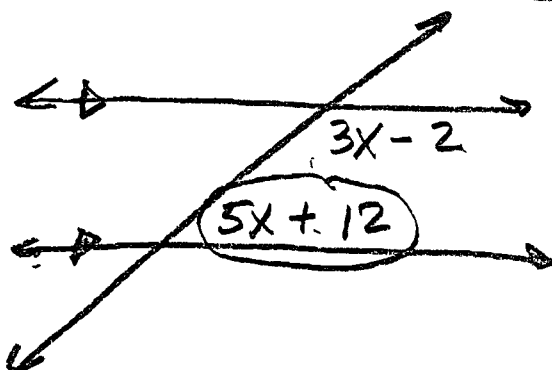
$$\frac{18}{2} = \frac{2x}{2}$$

$$\boxed{9 = x}$$

$$9x+9 \quad ?$$

$$9(9)+9 = \boxed{90^\circ}$$

EX



$$(5x+12) + (3x-2) = 180$$

$$8x + 10 = 180$$

$$8x = 170$$

$$x = \frac{170}{8} = \frac{85}{4}$$

$$\therefore 5\left(\frac{85}{4}\right) + 12$$

$$= \frac{425}{4} + \frac{48}{4} = \boxed{\frac{473}{4}^\circ}$$