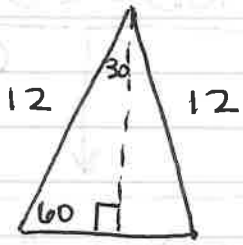
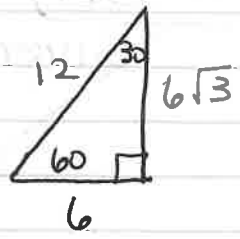
Homework 7-83 to 7-89
Skip 7-84, 7-85 bde

7-83



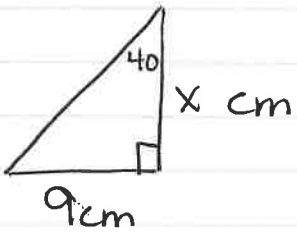


$A = \frac{1}{2}(12)(6\sqrt{3})$

$A = 36\sqrt{3}$

7-84 Skip

7-85 a only



$\tan 40 = \frac{9}{x}$

$x \approx 10.73$

tangent

7-86

a) SAS ≅

$6x + 6 = 8x + 2$

$4 = 2x$

$2 = x$

b) HL ≅

$3x + 1 = 97$

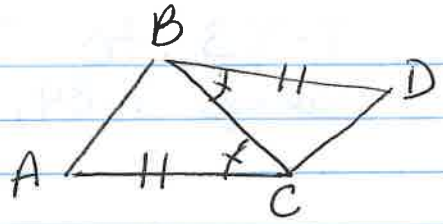
$-9 \quad -9$

$3x = 96$

$x = 32$

flow charts on back

a)



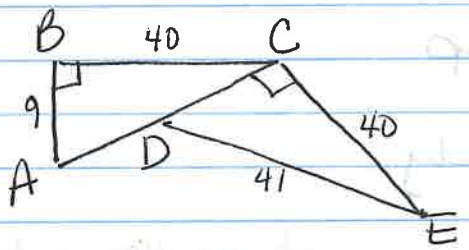
$\overline{AC} = \overline{DB}$ — Given

$\angle ACB = \angle DBC$ — Given

$\overline{BC} = \overline{CB}$ — reflexive

$\triangle ACB \cong \triangle DBC$ — SAS $\cong$

b)



$\triangle ABC$ and $\triangle DCE$ are right $\triangle$s — Given

$AC = DE$ — Pyth. Thm

$BC = CE$ — Given

$\triangle ABC \cong \triangle DCE$ — HL $\cong$

7-87

area of a rhombus

$$\frac{d_1 d_2}{2}$$

$$\frac{6 \cdot 8}{2} = \frac{48}{2} = 24 \text{ un}^2$$

7-88

a) $\frac{4}{20} = \frac{1}{5}$

b) $\frac{4}{5}$ $\left\{ 1 - \left(\frac{1}{5}\right) = \frac{4}{5} \right\}$

c) No area of the square is still 4 ft^2 out of 20 ft^2

7-89

20 17, 14, 11, 8, ...

+3 −3 −3 −3

$y = -3x + b$

$y = -3x + 20$

$y = -3(50) + 20$

50th term is −130