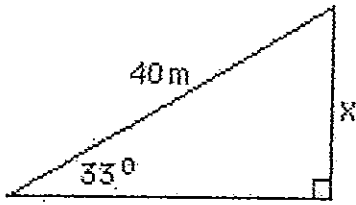


TRIGONOMETRY WORKSHEET 1 - Right Angle Triangles

Examples:

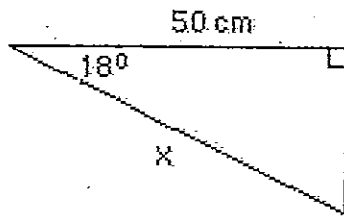


$$\sin 33^\circ = \frac{x}{40}$$

$$0.5446 = \frac{x}{40}$$

$$x = 0.5446 \times 40$$

$$x = 21.78 \text{ (22m)}$$

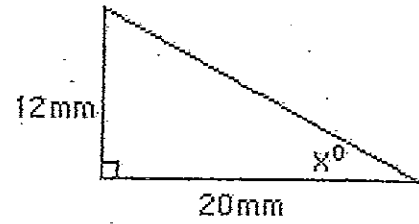


$$\cos 18^\circ = \frac{50}{x}$$

$$x = \frac{50}{\cos 18^\circ}$$

$$x = 50 \div 0.9510$$

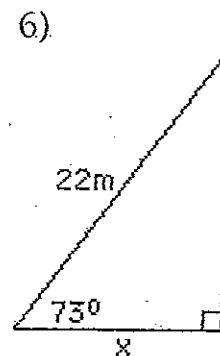
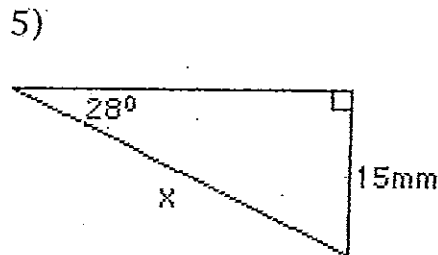
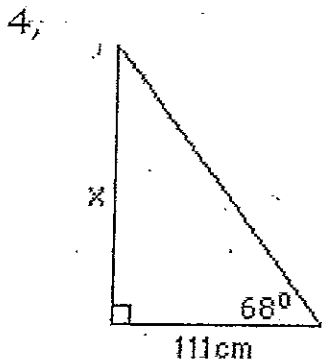
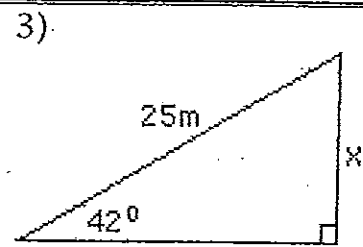
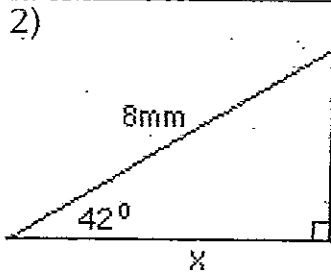
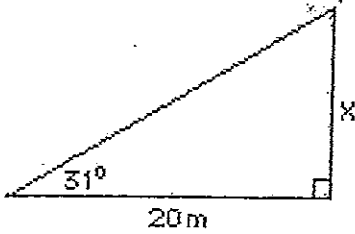
$$x = 52.58 \text{ (53 cm)}$$



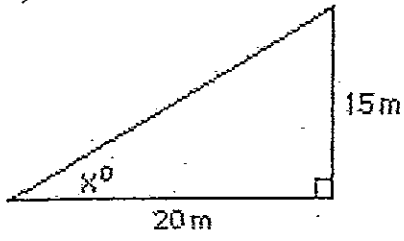
$$\tan x^\circ = \frac{12}{20}$$

$$x = \tan^{-1}(12/20)$$

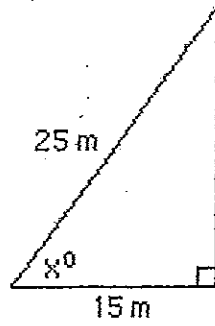
$$x = 30.96^\circ \text{ (31}^\circ\text{)}$$



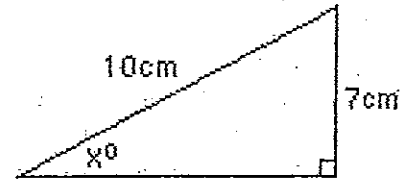
7)



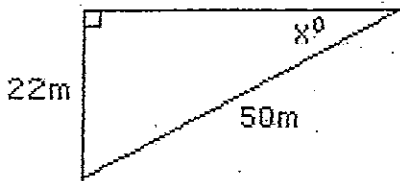
8)



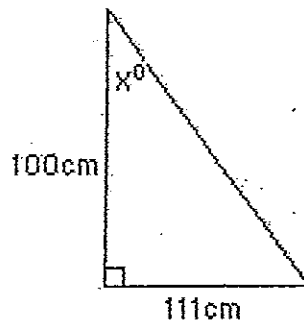
9)



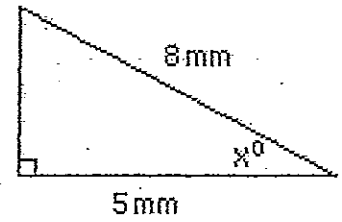
10)



11)



12)



Answers:

(1) 12.0 m

(2) 5.9 mm

(3) 16.7 m

(4) 274.7 cm

(5) 31.9 mm

(6) 6.4 m

(7) 36.9°

(8) 53.1°

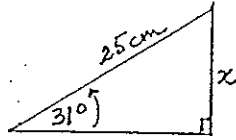
(9) 44.4°

(10) 26.1°

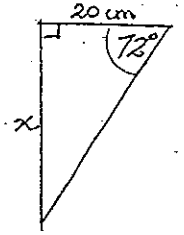
(11) 47.9°

(12) 51.3°

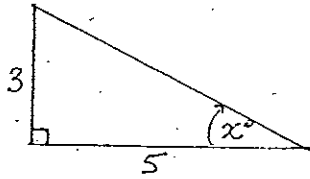
① FIND x



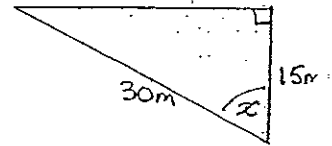
② FIND x



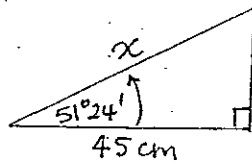
③ FIND x



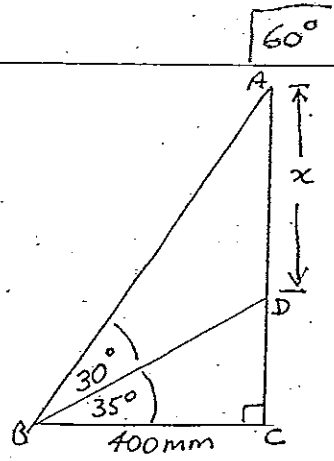
④ FIND x



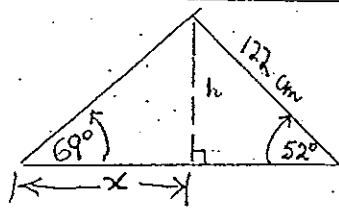
⑤ FIND x



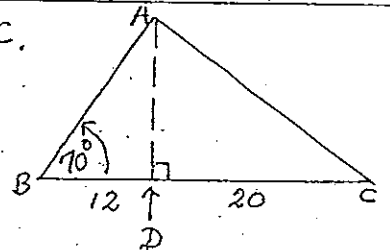
⑥ FIND x
[HINT: AC=? DC=?]



⑦ FIND x :



⑧ FIND the area of $\triangle ABC$.

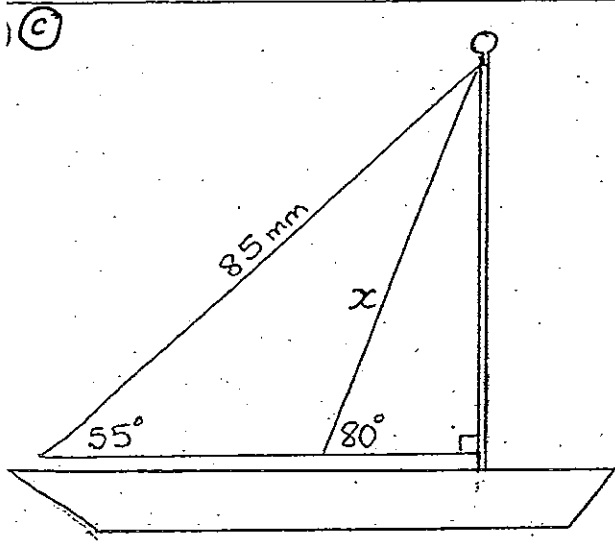
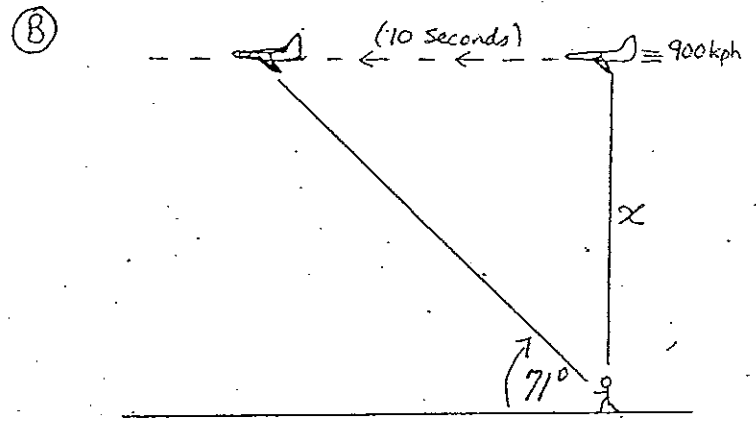
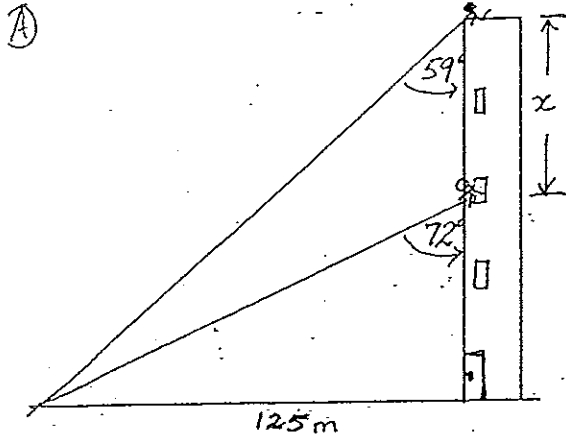


36.9

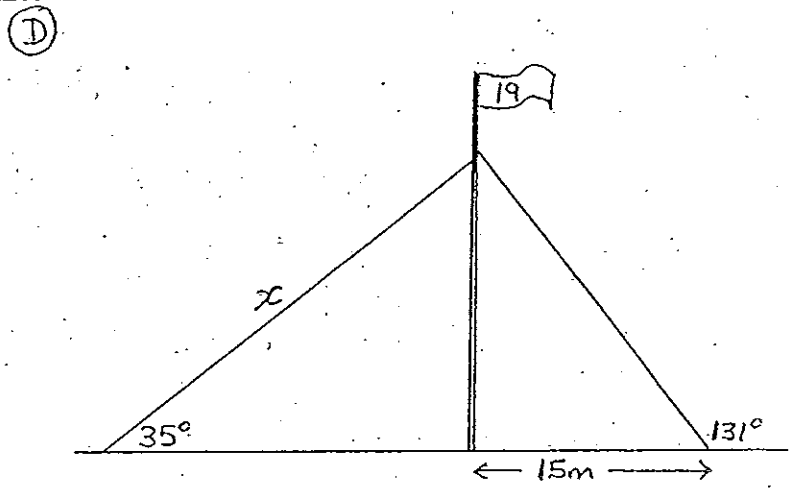
527.52 u^2

2478.702 units²

TRIG. PROBLEMS

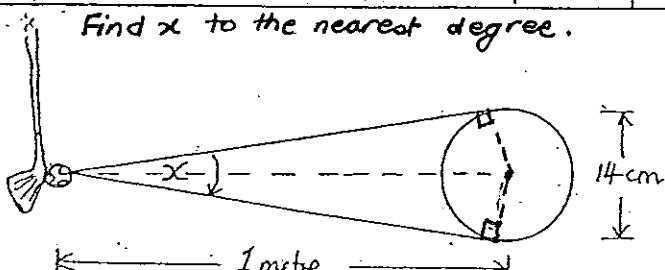


34.5 m



726 m

(E) Find x to the nearest degree.



70.7 m

30.08

91