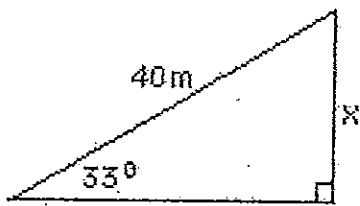


TRIGONOMETRY WORKSHEET 1 - Right Angle Triangles

Examples:

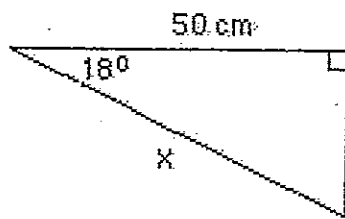


$$\sin 33^\circ = \frac{x}{40}$$

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

$$x = 0.5446 \times 40$$

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

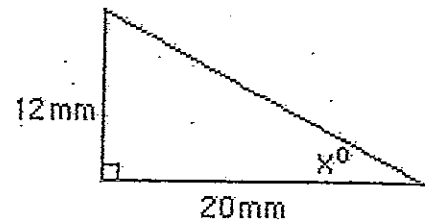


$$\cos 18^\circ = \frac{x}{50}$$

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

$$x = 50 \div 0.9510$$

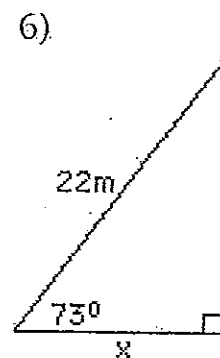
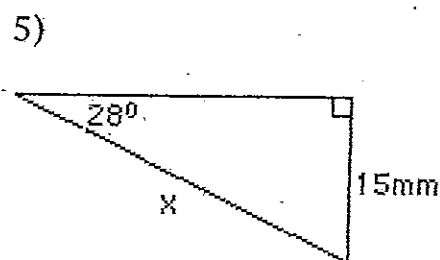
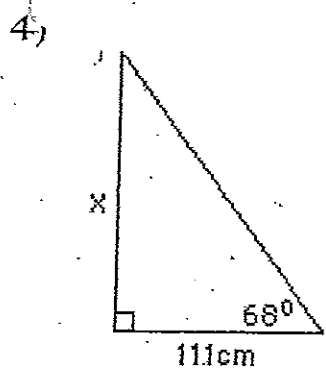
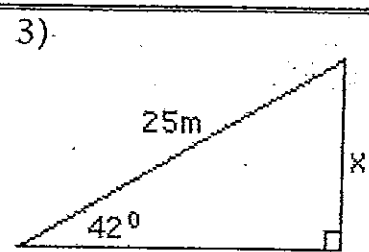
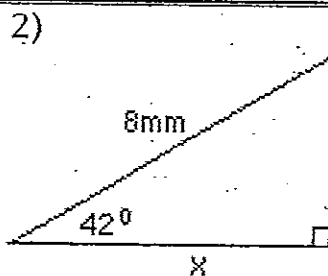
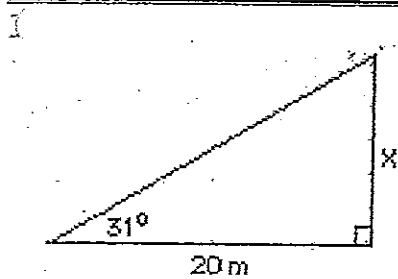
$$x = 52.58 \text{ (53cm)}$$



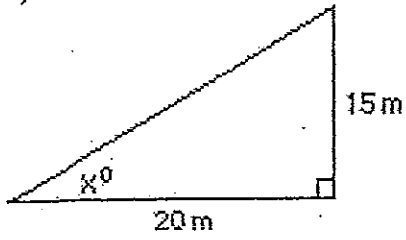
$$\tan x^\circ = \frac{12}{20}$$

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

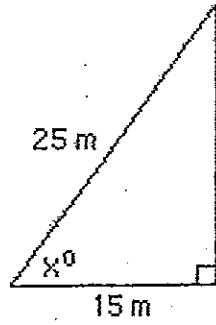
$$x = 30.96^\circ \text{ (31}^\circ\text{)}$$



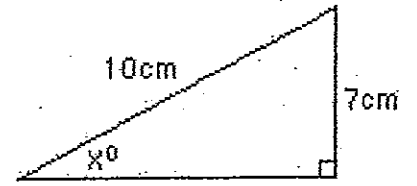
7)



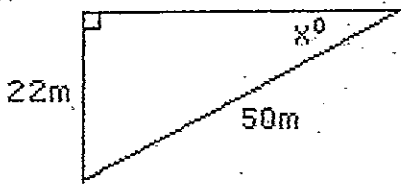
8)



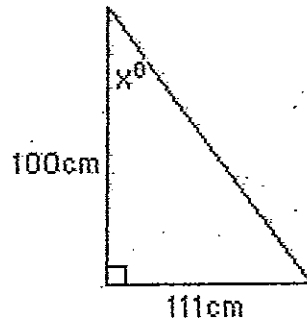
9)



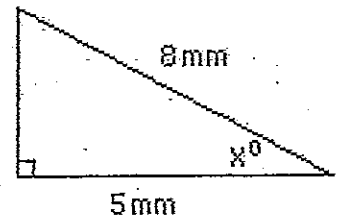
10)



11)



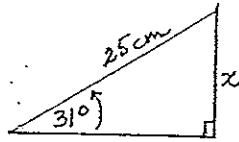
12)



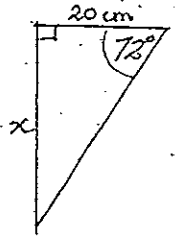
Answers:

- | | | | | |
|-------------------|-------------------|------------------|------------------|-------------------|
| (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



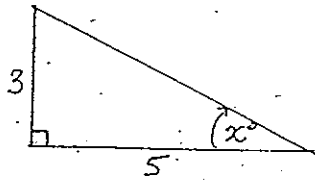
② FIND x



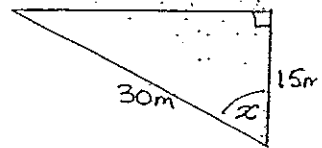
12.8

6.6

③ FIND x



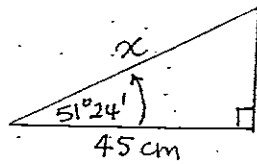
④ FIND x



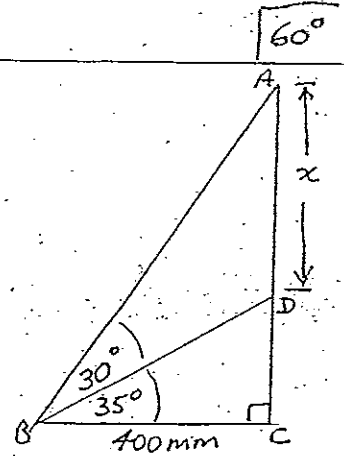
31°

60°

⑤ FIND x



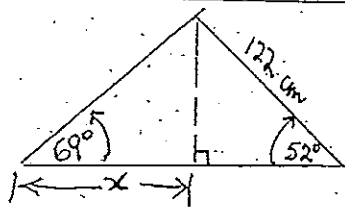
⑥ FIND x
[HINT: AC = ? DC = ?]



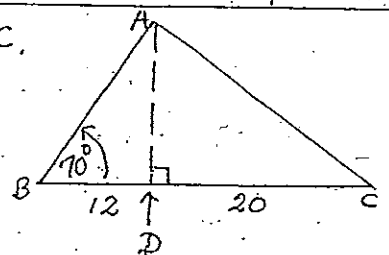
72.1 cm

578 mm

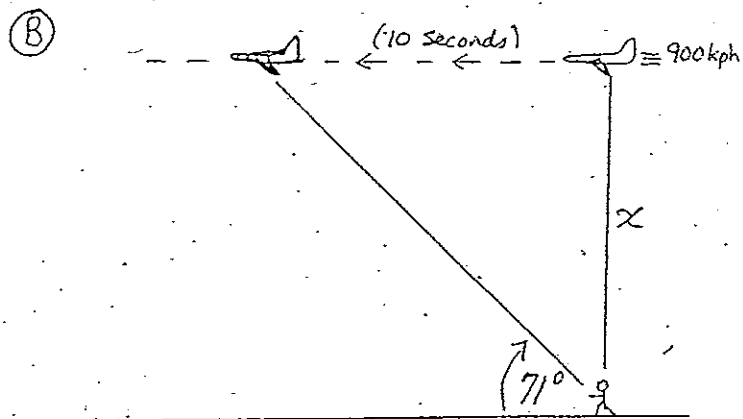
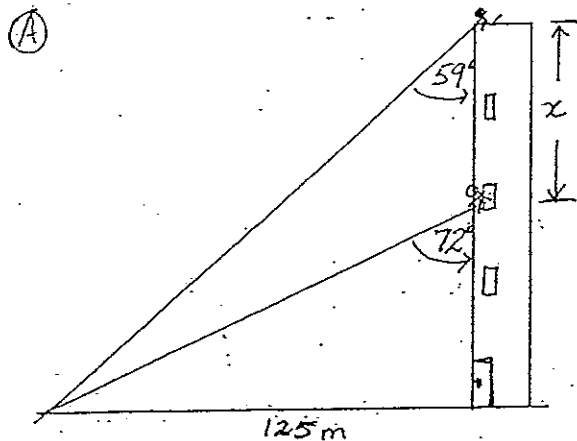
⑦ FIND x :



⑧ FIND the area of $\triangle ABC$.

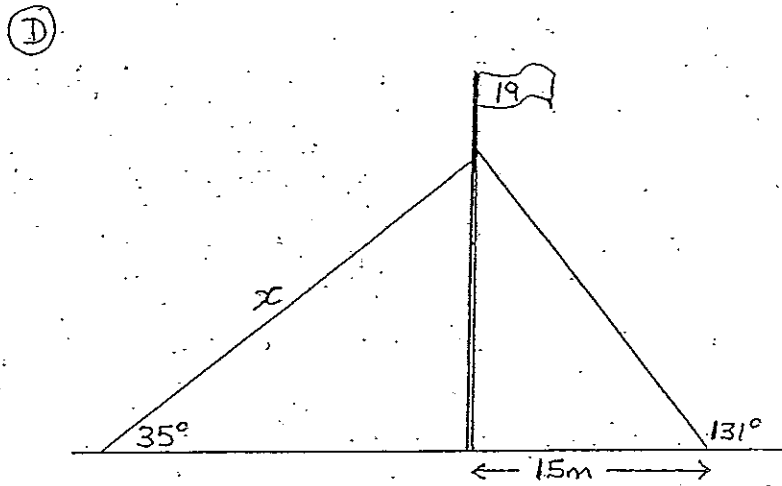
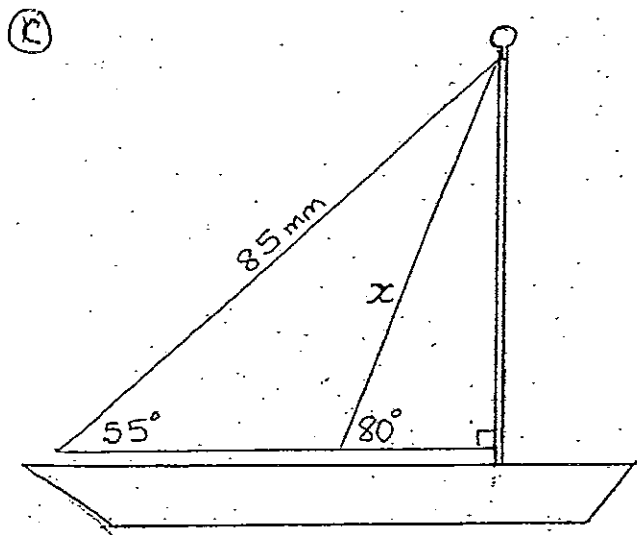


TRIG. PROBLEMS



34.5 m

7260 m



70.7 m

30.08

