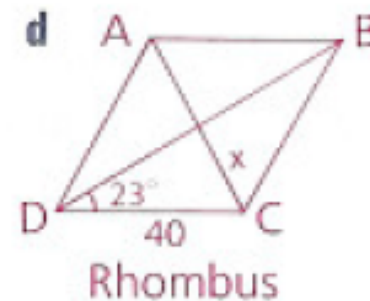
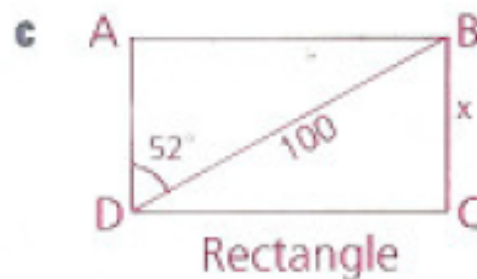
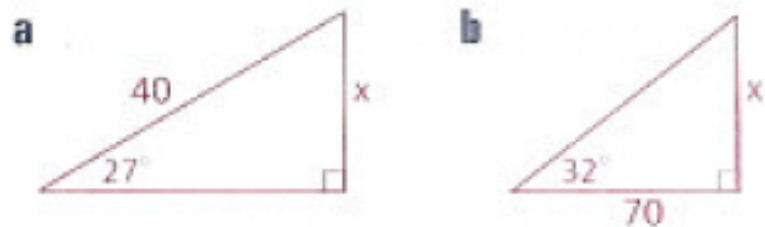


# Homework

p. 425: 4, 6, 7, 10, 15

4 In each case, find  $x$  to the nearest integer.



6 Solve each equation for  $x$  to the nearest integer.

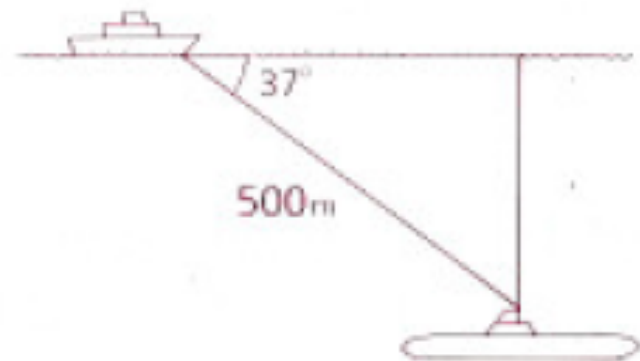
**a**  $\sin 25^\circ = \frac{x}{40}$

**b**  $\cos 73^\circ = \frac{35}{x}$

**c**  $\sin x^\circ = \frac{29}{30}$

7 A department-store escalator is 80 ft long. If it rises 32 ft vertically, find the angle it makes with the floor.

- 10** A sonar operator on a cruiser detects a submarine at a distance of 500 m and an angle of depression of  $37^\circ$ . How deep is the sub?



- 15** Two buildings are 100 dm apart across a street. A sunbather at point P finds the angle of elevation of the roof of the taller building to be  $25^\circ$  and the angle of depression of its base to be  $30^\circ$ . Find the height of the taller building to the nearest decimeter.

