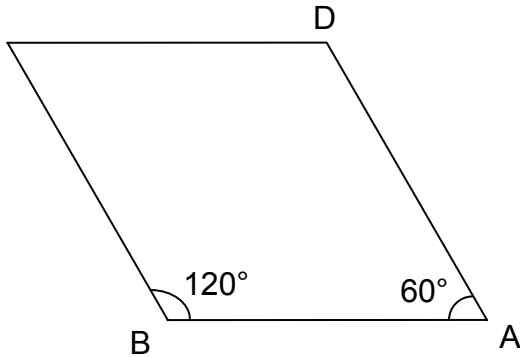


47 (a)

$$\angle DAB = 60^\circ$$

47 (b)



48 (a)

$$\angle x = 26 + 39$$

(Exterior \angle = Sum of interior opp. \angle s)

$$= 65^\circ$$

48 (b)

$$\angle y + 63 = 125^\circ$$

(Exterior \angle = Sum of interior opp. \angle s)

$$\angle y = 62^\circ$$

48 (c)

$$\angle z + 26 + 39 = 125^\circ$$

(Exterior \angle = Sum of interior opp. \angle s)

$$\angle z = 60^\circ$$

49 (a)

$\angle BCD$ is an isosceles triangle with equal sides of BC and BD.

$$\angle BDC = \frac{180 - 90}{2}$$

$$= 45^\circ$$

$$\angle CDG = 60 - 45$$

$$= 15^\circ$$

49 (b)

$$\angle CGD = 180 - 60 - 15$$

$$= 105^\circ$$

$\angle FGE = \angle CGD = 105^\circ$ (opposite angles)

50.

$$\angle ACD = 60 + 60$$

(Exterior \angle = Sum of interior opp. \angle s)

$$= 120^\circ$$

$$\angle ADC = \frac{180 - 120}{2}$$

(Base \angle s of isos. triangle)

$$= 30^\circ$$

$$\angle y = 180 - 30$$

(\angle s on a straight line)

$$= 150^\circ$$