

Lesson 3: Vertically opposite angles

Challenge

1

$$1 \quad a = b = 50^\circ$$
$$c = d = 120^\circ$$

2 As per diagram in Pupil Book
Coloured angle = 40°

Challenge

2

$$1 \quad a = 45^\circ$$
$$b = 125^\circ$$
$$c = 151^\circ, d = 29^\circ, e = 151^\circ$$
$$f = 118^\circ, g = 62^\circ, h = 62^\circ$$
$$i = 24^\circ, j = 90^\circ, k = 24^\circ, l = 66^\circ$$
$$m = 32^\circ, n = 58^\circ, p = 122^\circ$$
$$q = 111^\circ, r = 35^\circ, s = 34^\circ$$

2

Angle a	Angle b	Angle c	Angle d
65°	115°	65°	115°
78°	102°	78°	102°
23°	157°	23°	157°

Challenge

3

$$a = 64^\circ$$
$$b = 116^\circ$$
$$c = 64^\circ$$
$$d = 58^\circ$$
$$e = 32^\circ$$
$$f = 32^\circ$$