

## 50. Angle Rules

## ANSWERS

- 1) a) **Angle D** (Angles A and C are reflex and angle B is acute.)  
b)  **$250^\circ$**  (Allow any estimate between  $230^\circ$  and  $270^\circ$ .)
- 2) a)  $360^\circ - 200^\circ = \mathbf{160^\circ}$       b)  $180^\circ - 70^\circ = \mathbf{110^\circ}$   
c)  $170^\circ + 90^\circ = 260^\circ$ ,  $360^\circ - 260^\circ = \mathbf{100^\circ}$
- 3) The  $105^\circ$  angle and angle a are on a straight line,  
so  $a = 180^\circ - 105^\circ = \mathbf{75^\circ}$ .  
Angle b is vertically opposite the  $105^\circ$  angle, so  $b = \mathbf{105^\circ}$ .  
Angle c is vertically opposite angle a, so  $c = \mathbf{75^\circ}$ .

**Challenge answer:**

The minute hand does one full turn and three quarter turns,  
so it turns a total of  $360^\circ + 90^\circ + 90^\circ + 90^\circ = 360^\circ + 270^\circ = \mathbf{630^\circ}$ .