

## Worksheet 9

### Using Formulae

- 1 The length of the longer side of a rectangle is  $x$  cm, which is 5 cm greater than the length of its shorter side. Its perimeter  $p$  cm is given by:

$$p = 4x - 10$$

- (a) Find  $p$  when  $x = 15$ .

50 cm

- (b) Find  $p$  when  $x = 28$ .

102 cm

- (c) Find the length of the rectangle if the perimeter is 46 cm.

14 cm

- (d) Find the length of the rectangle if the perimeter is 95 cm.

26.25 cm

2 Use the formula  $A = 72 + \frac{t}{2}$  to calculate the value of  $A$ :

(a) when  $t = 12$

$$A = 78$$

(b) when  $t = 38$

$$A = 91$$

(c) when  $t = 75$

$$A = 109.5$$

(d) when  $t = 18.7$

$$A = 81.35$$