

No calculator

1. You may use the diagrams to help you answer these questions.

(a) Work out the value of P

$P = 10e$
 $e = 7$

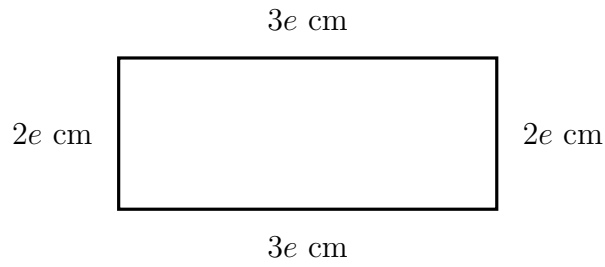
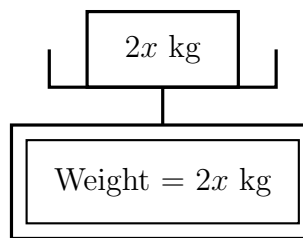


Diagram NOT accurately drawn

Perimeter = $10e$ cm

(b) Work out the value of W

$W = 2x$
 $x = 15$



(c) Work out the value of A

$A = 9y$
 $y = 6$

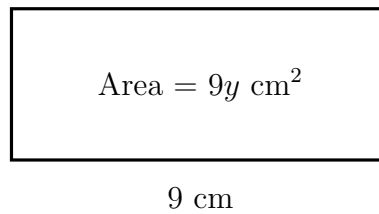
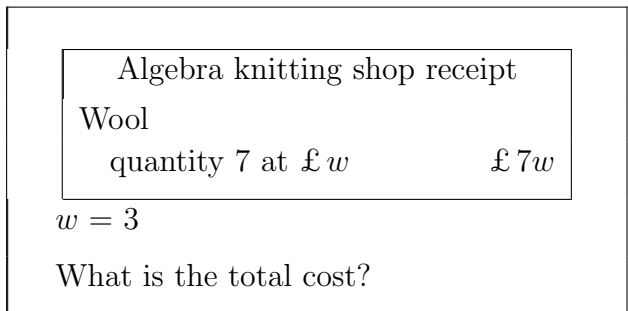


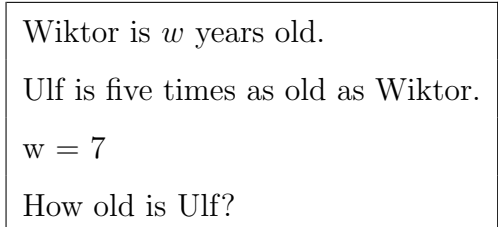
Diagram NOT accurately drawn

{You may use the word and algebra problems to help you answer these questions.}

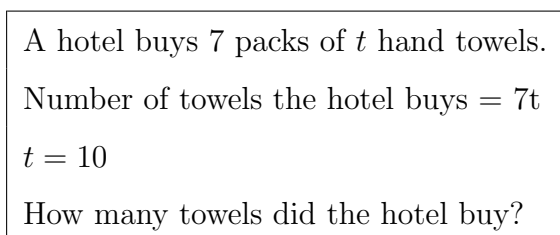
(d) $C = 7w$
 $w = 3$
 Work out the value of C .



(e) $u = 5w$
 $w = 7$
 Work out the value of u



(f) $n = 7t$
 $t = 10$
 Work out the value of n



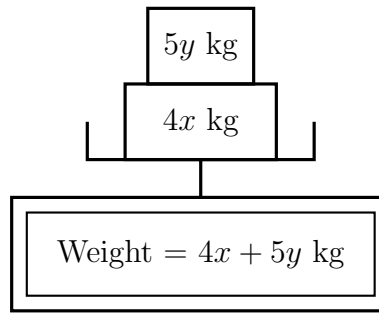
2. {No calculator: Students may use the diagrams / algebra and word problems to help them.}

(a) Work out the value of W

$$W = 4x + 5y$$

$$x = 3$$

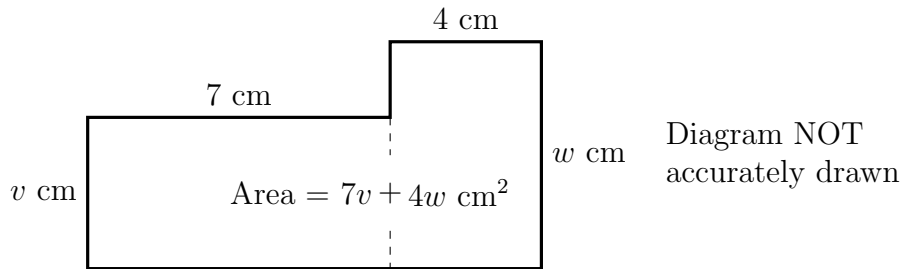
$$y = 6$$



(b) $A = 7v + 4w$

$$v = 3$$

$$w = 5$$



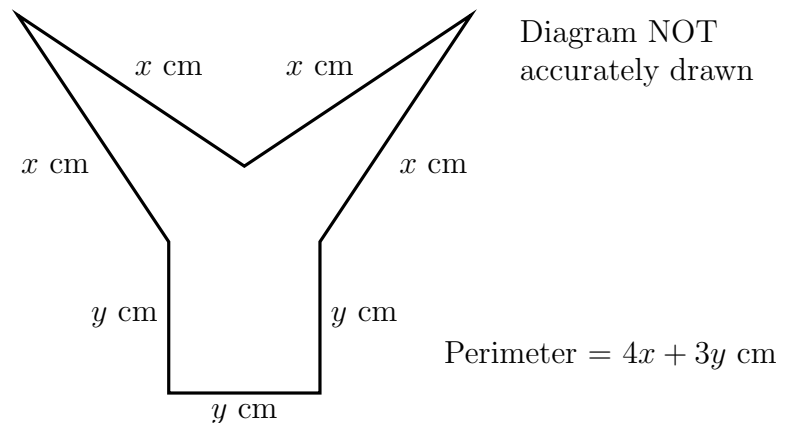
Work out the value of A

(c) $P = 4x + 3y$

$$x = 5$$

$$y = 3$$

Work out the value of P



(d)

$$T = 10c + 8d$$

$$c = 5$$

$$d = 2$$

Work out the value of T

A chef makes c chocolate cakes and d Dundee cakes. She cuts the chocolate cakes into 10 slices and the Dundee cakes into 8 slices

$$\text{Total slices of cake} = 10c + 8d$$

$$c = 5$$

$$d = 2$$

How many slices of cake did the chef make?

(e)

$$n = 2$$

$$w = 5$$

$$C = 2n + 9w$$

Work out the value of C

Algebra knitting shop receipt	
2 needles at £ n	£ $2n$
9 balls of wool at £ w	£ $9w$
Total	£ $2n + 9w$

What is the total cost when $n = 2$ and $w = 5$?

3. {No calculator similar to strand 1 but no context}

(a) $u = 4t$

$$t = 9$$

Work out the value of u

(b) $A = 3w$

Work out the value of A when $w = 5$

(c) $x = 6$

Work out the value of $3x$

4. {No calculator similar to strand 2 but no context}

(a) $p = 3$

$$q = 8$$

Work out the value of $7p + 2q$

(b) $y = 7n + 3d$

$$n = 2$$

$$d = 5$$

Work out the value of y

(c) $x = 30$

$$y = 9$$

$$P = 2x + 3y$$

Work out the value of P