For every question, **write which of the four it is** – expression, formula, equation or inequality – and then do the thing that goes with it.

1 Write which kind each one is. You do not have to do anything else in this question.

(a) $4x - 7$ (1)

(b) $A = lw$ (1)

(c) $3x + 2 = 14$ (1)

(d) $y \leq 6$ (1)

(e) $5a + 2a$ (1)

(f) $x > -2$ (1)

(6 marks)

2 Each of these is an expression. Simplify it.

(a) $7x + 4 - 3x$ (1)

(b) $3(2y + 5)$ (1)

(c) $12a + 18$ (factorise fully) (1)

(d) $4m \times 3$ (1)

(4 marks)

3 Each of these is a formula. Use it.

(a) $C = 700n$. Find C when $n = 8$ (1)

(b) $P = 2(l + w)$. Find P when $l = 9$ and $w = 5$ (1)

(c) $A = s^2$. Find A when $s = 7$ (1)

(d) $B = 150m + 20000$. Find B when $m = 40$ (1)

(4 marks)

4 Each of these is an equation. Solve it.

(a) $x + 15 = 32$ (1)

(b) $6n = 42$ (1)

(c) $4y - 5 = 19$ (1)

(d) $3(m + 2) = 21$ (1)

(4 marks)

5 Each of these is an inequality. Draw it on a number line.

(a) $x > 4$ (2)

(b) $x \leq -1$ (2)

(4 marks)

6 Write an inequality for each situation, saying what your letter stands for.

(a) A parcel weighs at most 20 kg (1)

(b) There were more than 60 people at the meeting (1)

(2 marks)