1. Solve each of the equations.

(a) $4x = 20$ (b) $x - 7 = 1$ (c) $4x + 2 = 18$

(d) $3x + 1 = 22$ (e) $5x - 3 = 42$ (f) $4a - 2 = a + 7$

(g) $5x = 2x + 5$ (h) $3(2x + 1) = 15$ (i) $2(2x - 1) = 3(3x - 9)$

(j) $4 - 2x = 16$ (k) $5(x + 1) = 2(2 + x)$ (l) $4(2g - 5) - 3g = 5 + 2(g - 1)$

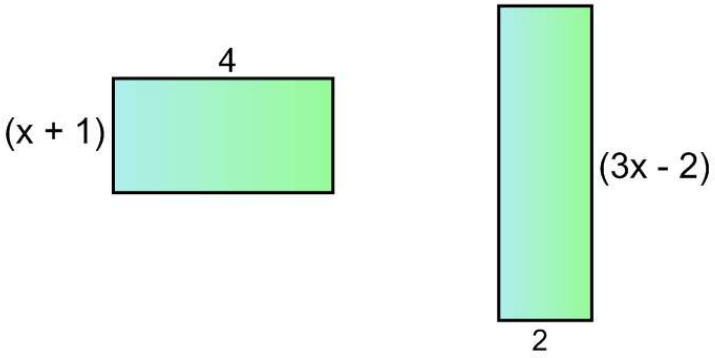
2. Solve the following inequalities.

(a) $3x > 21$ (b) $x - 20 < 4$ (c) $3x + 2 > 17$

(d) $4x - 8 \geq 40$ (e) $5x - 14 \leq 2x + 19$ (f) $6x + 5 > 4x - 19$

(g) $2x + 3 < 7x - 22$ (h) $4(2x + 1) \geq 3x - 1$ (i) $3(3x - 4) \leq 5x$

3. The two shapes shown have the same area. Calculate value of x.



4. A carton of juice costs *x* pence.

(a) Write down the cost of 6 cartons of juice.

A can of cola costs 32p less than a carton of juice.

(b) Write down the cost of a can of cola in terms of *x*.

(c) If 3 cartons of juice and 4 cans of cola cost £3.76, calculate the value of *x*.

5. A monthly phone bill costs £20 plus 20p per minute for voice calls.

(a) Write down an equation to represent the cost (C) of the phone call

where m is the number of minutes used.

(b) How much would a monthly bill cost if 140mins were used?