1) Solve these

a) $\dfrac{2x+3}{2x-1}-\dfrac{1}{x}=4$

b) $\sqrt{9x-14}=3\sqrt{x+10}-4$

c) $6x^4+x^3-11x^2=6x$

2) A group of 75 civic-minded students and teachers are out in the field, picking sweet potatoes for the needy. Working in the field, Kasey picks three times as many sweet potatoes as Davis—and then, on the way back to the car, she picks up five more sweet potatoes than that! Looking at her newly increased pile, Davis remarks "Wow, you've got 29 more potatoes than I do!" How many sweet potatoes did Kasey and Davis each pick?
Needy = necesitados
Civic-minded =cívicos

3) One leg of a right triangle is 7 cm shorter than the other leg. Its area is 30cm². Find its perimeter.
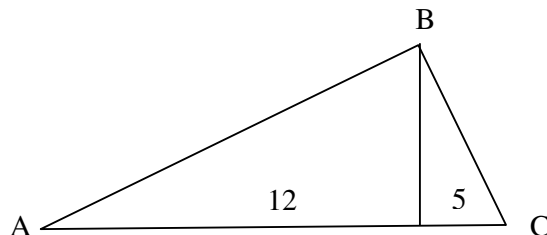
4) Solve these inequalities:

a)	$\dfrac{x+3}{2}-2\le\dfrac{x+1}{3}+\dfrac{2x+2}{4}$
b)	$-(x+2)^2+3x\le 2\cdot(-x^2+1)$

5) Solve the simultaneous inequalities: $\begin{cases} 3x+2y>7 \\ 4x-5y\leqslant -6 \end{cases}$

6) The scale of a map of an airport is 1:250. In this map, the length and width of a large hangar are 6,8 cm and 3,67 cm resp. Find the real surface area of this hangar.

7) Find the perimeter and surface area of this right triangle ABC:

1a	1b	1c	2	3	4a	4b	5	6	7
0.75	0,75	0,5	1,5	1,5	0,5	1	1	1	1,5