

Name:.....Nº:.....course:.....

1ª) Solve these inequalities:

a)	$2(x - 3) < 1 - 3(x - 1)$
b)	$x(x + 3) > 2 - x^2$
c)	$\frac{x^2 - 3x - 10}{x + 6} \leq 0$

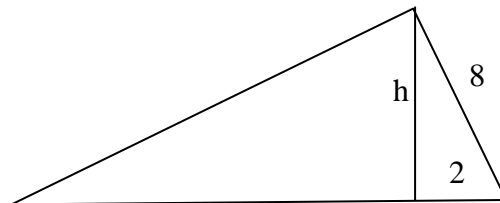
2ª) Solve the simultaneous inequalities:  $\begin{cases} \frac{2}{3}x - 5y > 4 \\ \frac{1}{3}x - \frac{2}{5} < -\frac{5}{6}y \end{cases}$

3ª) The scale of a house floor plant is 1:350. In this map, the length and width of the garden are 36 mm and 29 mm resp. Find the real surface area of the garden.

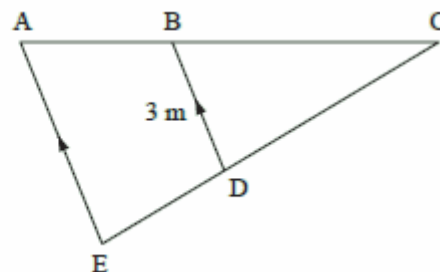
4ª) I've got a 23 cm height scale model of the Eiffel tower. Find the scale of my model if the height of the real tower is 325 m.

5ª) An electric light post casts a 10.2 m shadow. At that very instant a man who is 1.8 m. tall casts a 123 cm. shadow. How high above the ground is the light post?

6ª) The length of one side of a right angle triangle is 8 cm, and its projection on the hypotenuse is a segment of 2 cm. Find the other two sides and the height measured on the hypotenuse.



7ª) In the given figure, triangle BCD has area 8 m<sup>2</sup> and quadrilateral ABDE has area 12 m<sup>2</sup>. Find the length of side [AE] correct to the nearest cm.



1a	1b	1c	2	3	4	5	6	7
0.5	0,75	1	2	1,25	0,5	1	1,5	1,5