



COL·LEGI SANT JOSEP

DEPARTAMENT DE CIÈNCIES
1r ESO

3a Avaluació – Matemàtiques

REPTE: maths&english

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ALUMNE/A:

Hi guys!

Today your teachers want to challenge you. Are you in?

We are going to practice fractions, decimals numbers and English. Remember you can use a calculator. Are you ready?

We hope you enjoy this task and remember you can contact us by e-mail:

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Imma and Laia

THE SOCIAL NETWORK ELRACO.NET



ElRaco.net is a social network for boys and girls aged 8 to 18 where users can create blogs, post videos and photos, interact with other users, take part in competitions and play online games.

The network currently has a total of 2,200 users, with the following profile:

Age (in years)	Home				
	Barcelona	Girona	Lleida	Tarragona	Catalonia
From 8 to 11	284	139	74	103	600
From 12 to 15	445	271	191	293	1,200
From 16 to 18	171	90	35	104	400
Total	900	500	300	500	2,200

ACTIVITIES

- Express the data on age group and home town as fractions of the number of users in Catalonia. Simplify the fractions as far as possible. What do you call the simplest fraction?

Age (in years)	Home				
	Barcelona	Girona	Lleida	Tarragona	Catalonia
From 8 to 11					
From 12 to 15					
From 16 to 18					
Total					

- Add up the data in the *Total* row. What's the answer? Now convert each fraction into a decimal and add them up again. Did you expect this answer?

- The following table shows the behaviour of EIRaco.net users. Which activity has most users?

Behaviour: How many users...			
... have started a blog?	... post videos and photos?	... play online?	... take part in competitions?
3/5	6/8	4/10	7/11

4. Martina has registered with ElRaco.net. To block spam bots, the website asks for a numerical code and gives the following clues:

- The number for hundredths is 4.
- The number for thousandths is 3.
- The number for units is 1.
- The number for tens is 5.

What is the correct numerical code?

Fm0-P2/17

5. Martina has seen a publication on a site where you can download three digital books, free of copyright, on photography. The three books take up 125 MB: $\frac{1}{5}$ of the total size is taken up by images in the first book, $\frac{1}{3}$ by image files in the second book and $\frac{2}{7}$ by images in the third. Answer these questions:

- a) What fraction of the total megabytes is taken up by images?
- b) How many megabytes are taken up by text?

