

DECIMAL NUMBERS AND PROPORTION TEST - 2º ESO

Exercise 1: (1.25 points) Rewrite these numbers using scientific notation:

- a) $345.7865 \cdot 10^4 =$
- b) $0.000\ 000\ 000\ 000\ 000\ 000\ 000\ 986 =$
- c) $7\ 569\ 042\ 700\ 000\ 000\ 000\ 000 =$
- d) $0.39 \cdot 10^{-6} =$

Exercise 2: (1.25 points) Turn the following decimal numbers into fractions:

- a) $437.9872872872\dots =$
- b) $56.222222 =$
- c) $7.9844444444\dots =$
- d) $\pi =$

Exercise 3: (1 point) Aproxima:

- a) Trunca 6.987543 a las milésimas
- b) Redondea 54.372985 a las diezmilésimas
- c) Trunca y redondea 21.562478 a las cienmilésimas

Exercise 4: (1.25 points) Work out the value of x, z, h, whatever, in the following expressions:

$$\text{a) } \frac{4}{6} = \frac{8}{x} \quad \text{b) } \frac{z-2}{9} = \frac{4}{6} \quad \text{c) } \frac{2}{w} = \frac{w}{32}$$

Exercise 5: (0.75 points) The price of a vacation trip has increased 20% this last year. If the price now is €900, what was the original price?

Exercise 6: (1 point) A sheep running at a speed of thirty km/h can cross a grass field in fifteen minutes. How long would it take them to cross the same field if the speed was forty km/h?

Exercise 7: (1.5 points) Fill in the gaps and find the value of the constant knowing that the following magnitudes are:

a) Directly proportional:

	5	6		0.8	
18		54	27		63

b) Inversely proportional:

	4			0.5	
6	9	12	2		1

Exercise 8: (1 point) He pillado una oferta de telefonía móvil. Pagaba 20€ al mes, pero me rebajan un 10%, y después un 15% más por llevar cinco años con ellos. ¿Cuánto pago ahora?

Exercise 9: (1 point) Split 270€ in a directly proportional way to 3, 5 and 7