

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) $0.000\ 000\ 000\ 000\ 000\ 000\ 000\ 000\ 986 =$
- 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) $56.2222222 =$
- 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:

a) $\frac{4}{6} = \frac{8}{x}$ b) $\frac{z-2}{9} = \frac{4}{6}$ 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