EXAMEN PROPORCIONALIDAD - 2° ESO

Exercise 1: (1 point) Determine if the following magnitudes are directly or inversely proportional
      a) The price of a notebook and the number of notebooks that I can buy with €5
      b) The speed of a person and the time it takes him to cover a distance
      c) The number of pages of a book and its price
      d) The tickets I sell for a concert and the money I get

Exercise 2: (1 point) Work out the value of x in the following expressions:

a) $\dfrac{4}{6} = \dfrac{8}{x}$ b) $\dfrac{x}{9} = \dfrac{33}{11}$ c) $\dfrac{7}{5} = \dfrac{x}{14}$

Exercise 3: (1.5 points) Fill in the gaps for these magnitudes and find the value of the constants of proportionality knowing that they are:

a) Directly proportional

2	4	10		0.5	
10			15		7

b) Inversely proportional:

3		6	2		0.5
12	4			1	

Exercise 4: (1 point) Split €150 in a directly proportional way to 2, 3, and 5

Exercise 5: (1 point) The price of olive oil has increased a 10% during the last year. If the price of a bottle now is €4, what was its price last year?

Exercise 6: (1.25 points)
    a) Un smartphone costaba 300€, pero he encontrado una oferta en una tienda con un 25% de descuento. ¿Por cuánto dinero me saldrá ahora?
    b) En otra tienda me hacen un 30% de descuento y el empleado me ha vendido el móvil por 225 euros. ¿Le despedimos?

Exercise 7: (1 point) Three workers paint a wall in eight days:
      a) If I only have two workers, how long will it take them to paint the wall?
      b) How many workers do I need to paint the wall in six days?

Exercise 8: (1.25 points) Un coche necesita 3 horas para recorrer una distancia de 250 km. Si tuviera que hacer 70 km más, ¿cuánto tiempo necesitaría?

Exercise 9: (1 point) El 25% de los 850 alumnos de un colegio tuvieron la gripe el mes pasado. ¿Cuántos estudiantes no la cogieron?

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