

## FRACTIONS AND PROPORTION TEST - 2º ESO

**Exercise 1: (1 point)** Tenía el dinero de la excursión en el bolsillo, pero me he gastado dos tercios en un jersey chulísimo y luego tres quintos de lo que quedaba en una camiseta negra con una oveja. Me han sobrado ocho euros. ¿Cuánto dinero llevaba?

**Exercise 2: (0.75 points)** In a class we have thirty six students. One quarter play football and two sixths play basketball. The rest just play with their cell phone. How many students do each activity?

**Exercise 3: (3 points)** Work out:

a)  $\left(\frac{2}{5} - \frac{1}{4}\right)^{-2} - \frac{5}{2} \div \frac{3}{5} =$

b)  $\left(3 - \frac{2}{5} \cdot \frac{3}{7}\right)^{-1} - \frac{2}{9} =$

c)  $\frac{2^{-3} \cdot 5^4 \cdot 5^{-2} \cdot 2^6}{5^{-7} \cdot 2^5 \cdot 5} =$

d)  $\left(\sqrt{\frac{25}{16}}\right)^{-1} \div \frac{3}{7} - \left(\frac{3}{2}\right)^2 + 2^{-2} =$

**Exercise 4: (0.75 points)** The price of a vacation trip has increased 20% this last year. If the price was €750, what is the price now?

**Exercise 5: (1 point)** A sheep running at a speed of thirty km/h can cross a field in twelve minutes. How long would it take them to cross the same field if the speed was twenty km/h?

**Exercise 6: (1.5 points)** Fill in the gaps and find the value of the constant knowing that the following magnitudes are:

a) Directly proportional:

	5	25		75	
8		5	2		0.7

b) Inversely proportional:

2	10			0.5	
	8	1	4		16

**Exercise 7: (1 point)** Jan runs 120m in 20 seconds.

- How long does she need to run 150m?
- What distance can she run in 35 seconds?

**Exercise 8: (1 point)** Divide 350€ in a directly proportional way to 2, 5 y 7