

INTEGER NUMBERS AND PROPORTION TEST - 1º ESO

Exercise 1: (1 point) Last year I had thirty five sheep and I got one hundred and forty kilos of wool:

- a) If this year I have fifty sheep, how much wool will I get?
- b) I want to get three hundred kilos of wool. How many sheep do I need?

Exercise 2: (1 point) 5 taps can fill a pool with water in 240 minutes. How many taps do I need to fill the pool in 60 minutes?

Exercise 3: (0.75 points) Determine if the following amounts are directly or inversely proportional

- a) The number of students in a class and the number of teachers they have
- b) The number of unicorns I have and the days the food lasts
- c) The money I have and the kilos of carrots that I can buy

Exercise 4: (0.75 points) A computer cost 700€ last year, but the price has decreased by 15%. What's its price now?

Exercise 5: (1.5 points) Fill in the gaps and find the value of the constant of proportion knowing that the magnitudes are:

a) Directly proportional

	81	99		63	36
5			8	7	

b) Inversely proportional

1		6	30		0.5
	3	10		12	

Exercise 6: (1 point) Work out:

- a) $-5 + 12 =$
- b) $-4 \cdot (-7) =$
- c) $-12 : 3 =$
- d) $(-2)^5 =$

Exercise 7: (2 points) Work out:

- a) $-(-2) + (-9) - (+7) + (+3) - (-8) =$
- b) $-5 + 2 \cdot (-4) - 9 : (-3) - (-2)^4 =$
- c) $-(7 - 3 \cdot 5) + 8 - (-3) \cdot (-5) - 10 : (-2) =$

Exercise 8: (1 point) Se piensa que Pitágoras nació en el año 569 a.C y murió en el año 475 a.C. ¿Cuántos años tenía cuando murió?

Exercise 9: (1 point) Un camarero tiene un sueldo de 1200€ al mes. Tiene que pagar una hipoteca de 540€, 39€ de teléfono, 325€ por la letra del coche y unos 300€ entre ropa y comida. Las propinas suelen ser de unos 50€ al mes. ¿Puede ahorrar algo?