

INTEGER NUMBERS AND PROPORTION TEST - 1º ESO - B

Exercise 1: (1.5 points) Work out:

| | |
|-------------------|---------------------|
| a) $-5 + 9 =$ | b) $-2 - 8 =$ |
| c) $-30 : (-5) =$ | d) $2 \cdot (-7) =$ |
| e) $(-7)^2 =$ | f) $(-5)^3 =$ |

Exercise 2: (1.5 points) Work out:

| |
|--|
| a) $-5 + 20 : (-5) - 3 \cdot (-3) + (-2)^3 =$ |
| b) $9 - (-2) \cdot (+4) - 15 : (-3) + (-1)^{20} =$ |
| c) $-8 - 4 + 1 - 9 + 8 + 5 - 7 + 2 + 1 + 6 =$ |

Exercise 3: (1 point) Un hombre nació en el año 272 a.C. y murió en el año 223 a.C. ¿Con cuántos años murió? ¿Cuánto tiempo ha pasado desde su muerte?

Exercise 4: (1 point) Los beneficios de unos grandes almacenes durante un año vienen dados a continuación. Calcula el saldo al final de año:

- a) Enero - Marzo: Ganancias de 6800€
- b) Abril - Junio: Pérdidas de 4700€
- c) Julio - Septiembre: Ganancias de 9100€
- d) Octubre - Diciembre: Pérdidas de 1200€

Exercise 5: (1 point) A van traveling at a speed of 75km/h needs 12 minutes to cover a distance. How much time does it need if the speed is 60km/h?

Exercise 6: (1 point) In a map 2 cm = 5 km.

- a) What's the real distance between two cities that are 8 cm apart on the map?
- b) If two cities are 42 km apart, what's the distance on the map?

Exercise 7: (0.75 points) Fill in the gaps knowing that the following magnitudes are directly proportional and find the constant k:

| | | | | | | |
|----|---|-----|----|----|---|----|
| | 1 | 0.4 | | 2 | 8 | |
| 63 | | | 81 | 18 | | 27 |

Exercise 8: (0.75 points) Fill in the gaps knowing that the following magnitudes are inversely proportional and find the constant k':

| | | | | | | |
|---|---|----|---|---|-----|-----|
| 2 | | 3 | 6 | | 0.5 | |
| | 1 | 12 | | 4 | | 252 |

Exercise 9: (0.8 points) Determine if the following magnitudes are directly or inversely proportional

- a) The weight of apples and the money you pay for them
- b) The price of a cake and the number of cakes that I can buy with €20
- c) The workers painting a wall and the time they need to finish
- d) The age of a person and his height

Exercise 10: (0.75 points) Me han hecho un 30% de descuento en un vestido y me ha costado 28€. ¿Cuál era su precio antes?