

FRACTIONS AND DECIMAL NUMBERS TEST - 1st COURSE ESO

Exercise 1: (0.75 points) Round the following numbers to the indicated order:

- a) 42.3786291 to the nearest hundred-thousandth
- b) 0.3891239 to the nearest thousandth
- c) 32.864524 to the nearest tenth

Exercise 2: (0.75 points) Find the value of x so the next pairs of fractions are equivalent:

a) $\frac{10}{6} = \frac{x}{9}$ b) $\frac{34}{x} = \frac{10}{5}$ c) $\frac{8}{3} = \frac{x}{9}$

Exercise 3: (1 point) Turn the following fractions into decimal numbers and then classify them:

a) $\frac{21}{5} =$ b) $\frac{11}{6} =$
c) $\frac{7}{11} =$ d) 0.123456789...

Exercise 4: (1 point) Order the following decimal numbers from least to greatest:

$5.\overline{2917}$; $5.\overline{1917}$; $5.\overline{2917}$; $5.\overline{2917}$; 5.2917 ; $\overline{5.2917}$

Exercise 5: (1.5 points) Work out the value of the following operations:

a) $\frac{7}{6} + \frac{5}{3} \cdot \frac{2}{5} - \frac{2}{5} : \frac{6}{7} =$
b) $1 + \frac{3}{2} \cdot \left(2 - \frac{4}{5}\right) =$
c) $\sqrt{\frac{49}{16}} \cdot \frac{1}{3} - \left(\frac{5}{6}\right)^2 =$

Exercise 6: (1.5 points) Work out the value of the following operations:

a) $2.9 - 0.04 \cdot (8.1 - 7.98) =$ b) $15.72 : 1.5 - 4.5 \cdot 2.7 =$

Exercise 7: (1.25 points) I have to feed my mythical baby animals, so I am going to buy 27 kg of unicorn food, 3.25€/kg, 17.5 kg of elf food, 2.95€/kg and 0.750 kg of fairy food, 9.2€/kg. How much money do I need? Can I pay with two fifty euro bills?

PS: I am broke :(

Exercise 8: (1.25 points) Y ahora tengo que darle de comer a los animalitos. Esta mañana he alimentado a un tercio de los unicornios, y esta tarde a dos séptimos de los que quedaban. Si tengo un total de 315 unicornios:

- a) ¿Qué fracción de los unicornios he alimentado ya?
- b) ¿Cuántos unicornios no han comido todavía?

Exercise 9: (1 point) A car has to cover a distance of 1440 km. The first day it covers two fifths, and the second day, one third.

- a) What fraction of the distance is still left?
- b) How many km has the car already traveled?