



FIRST TERM GLOBAL TEST

2° ESO



Exercise 1: (2.25 ptos) Work out:

a) $(a^{-3} \cdot a^{-8}) : a^4 =$

b) $(b^{-2} \cdot b^5) : b^3 =$

c) $(x^5 \cdot x^{-4}) : (x^3 \cdot x^5) =$

d) $\frac{x^{-5} \cdot x^{-2} \cdot y^3}{y^5 \cdot x^7 \cdot y^{-8}} =$

Exercise 2: (1.25 ptos) Work out:

a) $\sqrt[5]{3200000} =$

b) $\sqrt[7]{\frac{x^{-35}y^{63}}{z^{-14}}} =$

c) $\sqrt{19360000} =$

Exercise 3: (1 pto) Classify the following numbers and turn them into fractions:

a) $\overline{7.84} =$

b) $4.1234 =$

c) $\overline{2.34798} =$

Exercise 4: (0.75 ptos) Fill in the gaps in this table and find the value of the constant of proportion knowing that the magnitudes are inversely proportional:

5	10	4		160
	8		1.5	

Exercise 5: (1 pto) Write the following numbers using scientific notation:

a) $0.000000043654729 =$

b) $16384.79 \cdot 10^{-8} =$

c) $0.00000247 \cdot 10^{-4} =$

Exercise 6: (1.5 ptos)

a) Due to a Christmas promotion the price of a present has been reduced by 20% and now it costs 40.6€. What was the price before?

b) $2 - (2 - 4)^3 + 3 \cdot \sqrt{49} : (-7) =$

Exercise 7: (2.25 ptos)

a) Eight elves need twelve hours to place all the presents on Santa's sleigh. How long would fifteen elves need?

b) I have bought 1.75 m of gift ribbon in order to make bows for my presents. If I need 20 cm for each bow, how many will I get? How much ribbon is left?

c) Divide 357€ in a directly proportional way to 5, 7 and 9

