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

   a) $3.7\overline{458}$ b) $25.\overline{847}$ c) 3.1416

Exercise 2: (1.5 ptos) Write the following numbers using scientific notation:

   a) $0.000\,000\,000\,078\,965 =$

   b) $23\,745\,613\,845\,921\,000\,000\,000\,000 =$

   c) $3984.279\cdot10^{-7} =$

   d) $0.0007498\cdot10^{-2} =$

Exercise 3: (2.25 ptos) Work out:

   a) $(x^{-2}\cdot x^{7}):x^{5} =$ b) $(a^{2}\cdot a^{-6}):a^{-3} =$

   c) $(y^{-4}\cdot y^{9}):(y^{3}\cdot y^{-8}) =$ d) $\dfrac{a^{3}\cdot b^{7}\cdot a^{-8}}{b^{-5}\cdot a^{-2}\cdot b^{3}} =$

Exercise 4: (1.25 ptos) Santa is carefully planning the best way to deliver all the presents without dying of exhaustion. First he will place one third of the presents under the trees, and rest for a while. Then he will deliver four fifths of the remaining ones, and rest for a bit. If he still has forty million presents in his sleigh, how many presents does he have to deliver in total?

Exercise 5: (1.25 ptos) Work out:

   a) $\sqrt{784\,000\,000} =$ b) $\sqrt[3]{1728000} =$ c) $\sqrt[4]{\dfrac{x^{-4}y^{-20}}{z^{28}}} =$

Exercise 6: (1.75 ptos) Work out:

   a) $2^{-2}-\left(2-\dfrac{5}{3}\right)^{-2}\cdot\left(1+\dfrac{3}{5}\right)^{-1} =$

   b) $\left(\sqrt{\dfrac{36}{49}}\right)^{-1}:\dfrac{3}{5}-\left(\dfrac{1}{2}-\dfrac{2}{9}\cdot\dfrac{1}{4}\right) =$

Exercise 7: (1 pto) Santa has 95 elves working for him and they all need new uniforms this year. Two of them so they can change when they are dirty. These are the prices of the different items:

Hat	5.25€
Shirt	9.7€
Trousers	12.3€
Socks	3.5€
Shoes	29.95€

If Santa has 11500€ to buy clothes, will it be enough?