Higher Maths Summer 2018 P2 Q1

(a)   Calculate $\dfrac{145\cdot3}{(12\cdot4 - 9\cdot8)^3}$, giving your answer correct to 3 significant figures.   [2]

(b)   Calculate the reciprocal of 47, giving your answer correct to 4 decimal places.   [2]

Higher Maths June 2017 P2 Q1

(a)   Calculate $\sqrt{8\cdot5^3} + (4\cdot5 - 0\cdot76)^2$, correct to 3 significant figures.   [2]

(b)   Calculate the reciprocal of −0·07, correct to 1 decimal place.   [2]

Higher Maths Summer 2018 P2 Q4b

(b)   The cube root of 32·768 is $33\frac{1}{3}$ % of a number.
       What is the number?   [2]

Higher Numeracy Summer 2017 P2 Q5c

(c)   A television uses 1 unit of electricity every 10 hours.
       A unit of electricity costs 9.8 p.

       (i)   Calculate the cost of having a television turned on for 24 hours.
              Circle your answer.   [1]

£23.52   £2.35   40.83 p   23.52 p   2.45 p

       (ii)   On average, Marta watches 4 hours of television each day.
              On average, how much **a week** does it cost her to watch television?
              Circle your answer.   [1]

27.44 p   £27.44   £39.20   39.2 p   10.78 p

.   The following table gives areas and populations of 6 countries.

Country	Area (km²)	Population in 2014
Wales	20 761	3 006 000
Singapore	716	5 399 200
Bermuda	53	64 237
India	3 287 240	1 244 392 079
Belgium	30 528	11 194 824
Tonga	720	104 270

(a)   How many times as dense is the country with the greatest population density
        as the country with the least population density?
        You must show all your working.   [4]

(b)   Which two countries have the same population densities to the nearest whole
        number of people per km²?   [1]
        Circle your answer.

India and Belgium	Wales and Tonga	Singapore and Tonga	Wales and Belgium	Bermuda and Tonga

(c)   If the information in the table had all been given correct to 2 significant figures
        would this make a difference to your answer in part (a)?   [2]

        Circle either TRUE or FALSE for each of the following statements.

No difference at all, the answer would be exactly the same.	TRUE	FALSE
One of the countries used in the comparison would be different.	TRUE	FALSE
Both countries used in the comparison would be different.	TRUE	FALSE
The only difference would be in rounding the final answer, nothing else in the calculation changes.	TRUE	FALSE
You cannot tell whether there would be a difference in the answer in part (a) if the information in the table had all been given correct to 2 significant figures.	TRUE	FALSE