

# Working with standard form

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**This task is about calculating numbers in standard form.**

Write your answers for a) to d) in **standard form**.

- a) A satellite travels  $4.0 \times 10^4$  kilometres when it orbits the Earth once. How many kilometres would the satellite travel after orbiting the Earth 1000 times?

Optional space for working

Standard form: \_\_\_\_\_ km

- b) The population of Christchurch city is  $3.78 \times 10^5$  and the population of Wellington city is  $2.15 \times 10^5$ . What is the total population of Christchurch and Wellington cities?

Optional space for working

Standard form: \_\_\_\_\_

- c) New Zealand has  $2.89 \times 10^5$  beehives and the average hive has  $5.0 \times 10^4$  bees. What is the total number of bees in New Zealand?

Optional space for working

Standard form: \_\_\_\_\_

- d) The Sun has a mass of  $2.0 \times 10^{30}$  kilograms and the Earth has a mass of  $6.0 \times 10^{23}$  kilograms. What is the Sun's mass divided by the Earth's mass?

Optional space for working

Standard form: \_\_\_\_\_