

Standard Form: Large Numbers

ANSWERS

1

Write 45 000 in standard form.

$$45\,000 = 4500 \times 10^1$$

$$45\,000 = 450 \times 10^2$$

$$45\,000 = 45 \times 10^3$$

Divide by 10, multiply by one more 10.

$$45\,000 = 4.5 \times 10^4$$

2

Write 620 000 in standard form.

$$620\,000 = 62\,000 \times 10^1$$

$$620\,000 = 6200 \times 10^2$$

$$620\,000 = 620 \times 10^3$$

$$620\,000 = 62 \times 10^4$$

$$620\,000 = 6.2 \times 10^5$$

3

Write 7300 in standard form.

$$7300 = 730 \times 10^1$$

$$7300 = 73 \times 10^2$$

$$7300 = 7.3 \times 10^3$$

4

Write 2 800 000 in standard form.

$$2\,800\,000 = 2.8 \times 10^6$$

5

Write 8 040 000 in standard form.

$$8\,040\,000 = 8.04 \times 10^6$$

6

Write 300 000 in standard form.

$$300\,000 = 3 \times 10^5$$

7

The Sun is about 150 000 000 km from Earth. Write this distance in standard form.

$$150\,000\,000 = 1.5 \times 100\,000\,000$$

Answer $1.5 \times 10^8 \text{ km}$

8

Mia writes 52 000 as 52×10^3 . Why is this not standard form? Write it correctly.

52 is not between 1 and 10

Answer 5.2×10^4

Standard Form: Large Numbers *further practice*

ANSWERS

9

Write 5.2×10^4 as an ordinary number.

$$5.2 \times 10\,000$$

Answer $52\,000$

10

Find the missing power.

$$4.7 \times 10^7 = 47\,000\,000$$

$$10^7 = 10\,000\,000$$

11

A stadium holds 6.05×10^4 people. Write this as an ordinary number.

$$6.05 \times 10\,000$$

Answer $60\,500$

12

Which is bigger, 3.2×10^5 or 320 000? Explain.

$$3.2 \times 10^5 = 3.2 \times 100\,000 = 320\,000$$

Answer *They are equal*

13

Mars is about 2.3×10^8 km from the Sun. Venus is about 1.08×10^8 km from the Sun. Which planet is closer to the Sun?

the same power of 10, and $1.08 < 2.3$

Answer *Venus*

14

Write these in order, smallest first.

2.4×10^5	9.1×10^4
240 500	2.04×10^5
1st 9.1×10^4	2nd 2.04×10^5
3rd 2.4×10^5	4th 240 500

$$240\,000, 91\,000, 240\,500, 204\,000$$

15

Town A has 8.5×10^4 people. Town B has 120 000 people. Which town has more people, and how many more?

$$120\,000 - 85\,000$$

Answer *Town B, 35 000 more*

16

Lily says 3.4×10^6 has six zeros when it is written as an ordinary number. Is Lily right? Explain.

$$3\,400\,000$$

Answer *No, it has 5 zeros*