

# Adding Two Numbers in Standard Form



# Adding Two Numbers in Standard Form

1. Work out the calculations.

Give your answers in standard form.

a)  $(4 \times 10^6) + (3 \times 10^6)$

b)  $(5 \times 10^8) + (3.1 \times 10^8)$

c)  $(3 \times 10^{-3}) + (5 \times 10^{-3})$

d)  $(4.24 \times 10^5) + (5.2 \times 10^5)$

2. Work out the additions.

Give your answers in standard form.

a)  $(8 \times 10^6) + (7 \times 10^6)$

b)  $(5 \times 10^8) + (9.1 \times 10^8)$

c)  $(6.3 \times 10^{-3}) + (5.2 \times 10^{-3})$

d)  $(8.68 \times 10^5) + (5.03 \times 10^5)$

3. Michael has worked out the answer to  $(3.5 \times 10^4) + (2.5 \times 10^3)$  by converting the numbers into ordinary form.

$$3.5 \times 10^4 = 35,000$$

$$2.5 \times 10^3 = 2,500$$

$$35,000 + 2,500 = 60,000$$

$$60,000 = 6 \times 10^4$$

a) What mistake has Michael made?

b) Work out the correct answer to the question.



## Adding Two Numbers in Standard Form

4. Complete the calculations.  
Give your answers in standard form.

a)  $(3.5 \times 10^5) + (2.7 \times 10^4)$

b)  $(3.5 \times 10^5) + (2.7 \times 10^6)$

c)  $(3.4 \times 10^{-3}) + (2.1 \times 10^{-2})$

d)  $(4.241 \times 10^{-2}) + (5.2 \times 10^{-4})$

e)  $(5.71 \times 10^2) + (2.4 \times 10^5)$

f)  $(2.5 \times 10^3) + (2.73 \times 10^6)$

5. The United Kingdom is made up of England, Scotland, Wales and Northern Ireland.

The approximate population of each is shown in the table.

England	Scotland	Wales	Northern Ireland
$5.6 \times 10^7$	$5.4 \times 10^6$	$3.1 \times 10^6$	1,880,000

What is the approximate population of the United Kingdom?



# Answers



# Adding Two Numbers in Standard Form

1. Work out the calculations.

Give your answers in standard form.

a)  $(4 \times 10^6) + (3 \times 10^6) = 7 \times 10^6$

b)  $(5 \times 10^8) + (3.1 \times 10^8) = 8.1 \times 10^8$

c)  $(3 \times 10^{-3}) + (5 \times 10^{-3}) = 8 \times 10^{-3}$

d)  $(4.24 \times 10^5) + (5.2 \times 10^5) = 9.44 \times 10^5$

2. Work out the additions.

Give your answers in standard form.

a)  $(8 \times 10^6) + (7 \times 10^6) = 1.5 \times 10^7$

b)  $(5 \times 10^8) + (9.1 \times 10^8) = 1.41 \times 10^9$

c)  $(6.3 \times 10^{-3}) + (5.2 \times 10^{-3}) = 1.15 \times 10^{-2}$

d)  $(8.68 \times 10^5) + (5.03 \times 10^5) = 1.371 \times 10^6$

3. Michael has worked out the answer to  $(3.5 \times 10^4) + (2.5 \times 10^3)$  by converting the numbers into ordinary form.

$$3.5 \times 10^4 = 35,000$$

$$2.5 \times 10^3 = 2,500$$

$$35,000 + 2,500 = 60,000$$

$$60,000 = 6 \times 10^4$$

a) What mistake has Michael made?

$35,000 + 2,500 = 37,500$  not  $60,000$

b) Work out the correct answer to the question.  $3.75 \times 10^4$



# Adding Two Numbers in Standard Form

4. Complete the calculations.  
Give your answers in standard form.

a)  $(3.5 \times 10^5) + (2.7 \times 10^4) = 3.77 \times 10^5$

b)  $(3.5 \times 10^5) + (2.7 \times 10^6) = 3.05 \times 10^6$

c)  $(3.4 \times 10^{-3}) + (2.1 \times 10^{-2}) = 2.44 \times 10^{-2}$

d)  $(4.241 \times 10^{-2}) + (5.2 \times 10^{-4}) = 4.293 \times 10^{-2}$

e)  $(5.71 \times 10^2) + (2.4 \times 10^5) = 2.40571 \times 10^5$

f)  $(2.5 \times 10^3) + (2.73 \times 10^6) = 2.7325 \times 10^6$

5. The United Kingdom is made up of England, Scotland, Wales and Northern Ireland.

The approximate population of each is shown in the table.

England	Scotland	Wales	Northern Ireland
$5.6 \times 10^7$	$5.4 \times 10^6$	$3.1 \times 10^6$	1,880,000

What is the approximate population of the United Kingdom?  $6.638 \times 10^7$

