Subtracting Two Numbers in Standard Form

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Maths

Subtracting Two Numbers in Standard Form

1. Work out the calculations.

Give your answers in standard form.

a) $(7 \times 10^4) - (3 \times 10^4)$

b) $(8.4 \times 10^8) - (3.1 \times 10^8)$

c) $(3 \times 10^{-3}) - (1.2 \times 10^{-3})$

d) $(9.24 \times 10^6) - (5.5 \times 10^6)$

e) $(8 \times 10^6) - (7.2 \times 10^6)$

f) $(9.42 \times 10^8) - (9.1 \times 10^8)$

2. Complete the subtractions.

Give your answers in standard form.

a) $(6 \times 10^5) - (4 \times 10^4)$

b) $(5 \times 10^7) - (2.7 \times 10^6)$

c) $(3.4 \times 10^{-3}) - (2.1 \times 10^{-4})$

d) $(4.241 \times 10^{-3}) - (5.2 \times 10^{-5})$

e) $(5.71 \times 10^5) - (2 \times 10^2)$

f) $(2.73 \times 10^7) - (2.5 \times 10^4)$

Subtracting Two Numbers in Standard Form

3. Find the value of each letter.

a) p and q are integers.

$(p \times 10^7) + (q \times 10^2) = 50{,}000{,}400$

b) n is an positive integer less than 10.

$(n \times 10^8) - (n \times 10^5) = 399{,}600{,}000$

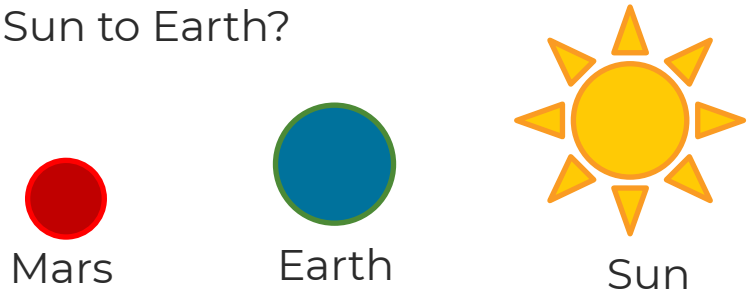
c) a and b are integers.

b - a = 1

$(b \times 10^{-2}) - (a \times 10^{-3}) = 0.044$

4. The minimum distance from Earth to Mars is 5.46×10^7 km.
The minimum distance from the Sun to Mars is 2.06×10^8 km.

What is the minimum distance from the Sun to Earth?



Answers

Subtracting Two Numbers in Standard Form

1. Work out the calculations.
Give your answers in standard form.

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

b) $(8.4 \times 10^8) - (3.1 \times 10^8) = 5.3 \times 10^8$

c) $(3 \times 10^{-3}) - (1.2 \times 10^{-3}) = 1.8 \times 10^{-3}$

d) $(9.24 \times 10^6) - (5.5 \times 10^6) = 3.74 \times 10^6$

e) $(8 \times 10^6) - (7.2 \times 10^6) = 8 \times 10^5$

f) $(9.42 \times 10^8) - (9.1 \times 10^8) = 3.2 \times 10^7$

2. Complete the subtractions.
Give your answers in standard form.

a) $(6 \times 10^5) - (4 \times 10^4) = 5.6 \times 10^5$

b) $(5 \times 10^7) - (2.7 \times 10^6) = 4.73 \times 10^7$

c) $(3.4 \times 10^{-3}) - (2.1 \times 10^{-4}) = 3.19 \times 10^{-3}$

d) $(4.241 \times 10^{-3}) - (5.2 \times 10^{-5}) = 4.189 \times 10^{-3}$

e) $(5.71 \times 10^5) - (2 \times 10^2) = 5.708 \times 10^5$

f) $(2.73 \times 10^7) - (2.5 \times 10^4) = 2.7275 \times 10^7$

Subtracting Two Numbers in Standard Form

3. Find the value of each letter.

a) p and q are integers.

$(p \times 10^7) + (q \times 10^2) = 50{,}000{,}400$

$p = 5, q = 4$

b) n is a positive integer less than 10.

$(n \times 10^8) - (n \times 10^5) = 399{,}600{,}000$

$n = 4$

c) a and b are integers.

$b - a = 1$

$(b \times 10^{-2}) - (a \times 10^{-3}) = 0.044$

$a = 6, b = 5$

4. The minimum distance from Earth to Mars is 5.46×10^7 km.

The minimum distance from the Sun to Mars is 2.06×10^8 km.

What is the minimum distance from the Sun to Earth?

1.514×10^8 km