Scientific Notation

Simplify and express in scientific notation:

Example 1

$(2 \times 10^4) + (3 \times 10^5)$

$= (2 \times 10^4) + (3 \times 10^4) \times 10$

$= (2 \times 10^4) + (30 \times 10^4)$

$= 32 \times 10^4$

$= \mathbf{3.2 \times 10^5}$

Example 2

$(7 \times 10^8) - (4 \times 10^6)$

$= (7 \times 10^6) \times 10^2 - (4 \times 10^6)$

$= (700 \times 10^6) - (4 \times 10^6)$

$= 696 \times 10^6$

$= \mathbf{6.96 \times 10^8}$

Simplify each problem and express the answer in scientific notation.

1) $(2 \times 10^3) + (5 \times 10^5)$

Answer : _____ X 10 _____

2) $(4 \times 10^8) - (9 \times 10^7)$

Answer : _____ X 10 _____

3) $(8 \times 10^9) - (3 \times 10^7)$

Answer : _____ X 10 _____

4) $(5 \times 10^7) + (1 \times 10^6)$

Answer : _____ X 10 _____

5) $(4 \times 10^2) + (7 \times 10^3)$

Answer : _____ X 10 _____

6) $(9 \times 10^5) - (6 \times 10^4)$

Answer : _____ X 10 _____

7) $(1 \times 10^6) - (8 \times 10^4)$

Answer : _____ X 10 _____

8) $(5 \times 10^9) + (3 \times 10^8)$

Answer : _____ X 10 _____