MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

1) How many atoms are in 0.534 mol of nickel, Ni? 1) _____

A) 3.22×10^{23} atoms B) 1.13×10^{24} atoms
C) 6.98×10^{21} atoms D) 1.48×10^{25} atoms

2) How many moles are in 8.73×10^{25} atoms of boron, B? 2) _____

A) 5.04×10^{-25} moles B) 3.84×10^{27} moles
C) 6.90×10^{-3} moles D) 145 moles

3) How many moles are present in 17.4 g of lead? 3) _____

A) 0.0840 moles
B) 11.9 moles
C) 1.05×10^{25} moles
D) 0.0994 moles
E) 10.06 moles

4) Determine the mass of hydrogen (in grams) that contains 5.08×10^{15} hydrogen atoms. 4) _____

A) 3.06×10^{39} g B) 8.50×10^{-9} g C) 8.5×10^{15} g D) 5.12×10^{15} g

5) How many grams are contained in a 0.893 mol sample of methane, CH_4? 5) _____

A) 1.48×10^{-24} g B) 5.38×10^{23} g
C) 14.3 g D) 18.0 g

6) Aluminum sulfate, $Al_2(SO_4)_3$, is used in tanning leather, purifying water, and the manufacture of antiperspirants. Calculate its molecular or formula mass. 6) _____

A) 315.15 amu B) 74.98 amu C) 342.17 amu D) 278.02 amu

1)A
2)D
3)A
4)B
5)C
6)C