

BE-1B TUESDAY 10-31-06

AHSGE Workbook:

<u>Page</u>	<u>Problem</u>
30	1, 2, 3, 4
49	1

① Sci. Not. $\Rightarrow 0.0003054$ $\therefore 3.054 \times 10^{-4}$ $\leftarrow 4$ smaller
1 2 3 4 Bigger

② Sci. Not. $\Rightarrow 373 \times 10^{-8}$ $\therefore 3.73 \times 10^{-6}$ $\leftarrow 2$ bigger
2 smaller

③ $(7.5 \times 10^3)(5 \times 10^5) \Rightarrow (5)(7.5) \times 10^{5+3}$
 $= 37.5 \times 10^8$
 $= 3.75 \times 10^9$

④ $(9.9 \times 10^3)(6 \times 10^{-6}) = 59.4 \times 10^{-6+3} = 59.4 \times 10^{-3}$
 $= 5.94 \times 10^{-2}$

⑤ $\frac{49 \times 10^3}{5 \times 10^{-5}} = \left(\frac{49}{5}\right) \times 10^{3-(-5)} = 9.8 \times 10^8$

$$\begin{array}{r} 09.8 \\ 5 \overline{)49.00} \\ \underline{45} \\ 40 \end{array}$$

⑥ $\frac{4 \times 10^4}{6.4 \times 10^{-7}} = \left(\frac{4}{6.4}\right) \times 10^{4-(-7)} = \frac{1}{1.6} \times 10^{11}$

$$\begin{array}{r} 0.0625 \\ 1.6 \overline{)1.0000} \\ \underline{96} \\ 40 \\ \underline{32} \\ 80 \\ \underline{80} \\ 0 \end{array}$$

$= 0.625 \times 10^{11}$
 $= 6.25 \times 10^{10}$

⑦ Degree of $10a^5b^4 \Rightarrow 5+4 = \boxed{9}$

⑧ Degree of $10a^3b^2 + 13a^4b^4 - 6a^4b^6$

degrees
of EACH
MONOMIAL

5

8

$\boxed{10}$

Degree of POLYNOMIAL

⑨ $(5a - 3a^2) + (8 + 7a)$

$\boxed{5a} - 3a^2 + 8 \boxed{+ 7a} \Rightarrow 12a - 3a^2 + 8$

$= \boxed{-3a^2 + 12a + 8}$

⑩ $(6a - 2b^2 - a) + (b - 3 + 9a^2)$

$\underline{6a} - \underline{2b^2} - \underline{a} \boxed{+ b} - 3 + 9a^2$

$\boxed{5a - 2b^2 + b - 3 + 9a^2}$

⑪ $(5a - 3a^2) - (-6a - 6)$

$\underline{5a} - 3a^2 + \underline{6a} + 6$

$\boxed{11a - 3a^2 + 6}$

⑫ $(11p - 6g^2 - g) - (g^2 - 5p + 7p^2)$

$\boxed{11p} - \underline{6g^2} - g - \underline{g^2} \boxed{+ 5p} \boxed{- 7p^2}$

$\boxed{16p - 7g^2 - g - 7p^2}$