Answers to problems 54- in page 332.

## Mixed Review

54. a. $1.2 \times 10^{2} \mathrm{~g} \mathrm{CO}_{2}$
b. $9.70 \mathrm{~mL} \mathrm{H}_{2} \mathrm{O}$
c. $4.49 \times 10^{22}$ molecules $\mathrm{H}_{2} \mathrm{O}$
55. a. $\frac{2 \mathrm{~mol} \mathrm{NaN}_{3}}{2 \mathrm{~mol} \mathrm{Na}}, \frac{2 \mathrm{~mol} \mathrm{NaN}_{3}}{3 \mathrm{~mol} \mathrm{~N}_{2}}$, $\frac{2 \mathrm{~mol} \mathrm{Na}}{2 \mathrm{~mol} \mathrm{NaN}_{3}}, \frac{2 \mathrm{~mol} \mathrm{Na}}{3 \mathrm{~mol} \mathrm{~N}_{2}}$, $\frac{3 \mathrm{~mol} \mathrm{~N}_{2}}{2 \mathrm{~mol} \mathrm{NaN}_{3}}, \frac{3 \mathrm{~mol} \mathrm{~N}_{2}}{2 \mathrm{~mol} \mathrm{Na}}$
b. $4.0 \mathrm{~mol} \mathrm{~N}{ }_{2}$
c. 11.0 g Na
d. $4.86 \times 10^{23}$ molecules $\mathrm{N}_{2}$
