(37)

$$
\begin{aligned}
& \sum_{i=1}^{100}\left(i^{5}-2 i^{2}\right)=\sum_{i=1}^{100} i^{5}-2 \sum_{i=1}^{100} i^{2} \\
& =\frac{100^{2}(101)^{2}\left(2(100)^{2}+2(100)+1\right)}{12}-2\left(\frac{100(101)(201)}{6}\right) \\
& =
\end{aligned}
$$

$$
\begin{array}{rlr}
f(x)=x^{2}+3 \quad \text { at } x=.1,2, \ldots .1 .0 \\
f\left(a_{1}\right) & =f(.1)=(.1)^{2}+3 & a_{1}=.1 \\
f\left(a_{2}\right)=f(.2) & =(.2)^{2}+3 & a_{2}=.2 \\
f\left(a_{i}\right) & =f(.1 i) & =(.1 i)^{2}+3 \\
\downarrow & a_{3}=.3 \\
\sum_{i=1}^{10} a_{i}=\sum_{i=1}^{10} f(.1 i) & =\sum_{i=1}^{10}\left[(.1 i)^{2}+3\right] \\
=\sum_{i=1}^{10}\left(.01 i^{2}+3\right) & =.01 \sum_{i=1}^{10} i^{2}+\sum_{i=1}^{10} 3 \\
& =.01\left(\frac{10(11)(21)}{6}\right. \\
& =3.85+3(10) \\
& =33.85
\end{array}
$$

$$
\begin{aligned}
& \text { ex,7 } f(x)=3 x^{2}-4 x+2 \\
& f(.95+.1 i)= \\
& \text { at } x=1.05,1.15,1.25, \ldots, 2.95 \\
& a_{1}=1.05 \\
& a_{2}=1.15 \\
& a_{3}=1.25 \\
& \sum_{i=1}^{20} f(.95+.1 i) \\
& a_{20}=2.95 \\
& a_{i}=.95+.1 i \\
& \sum_{i=1}^{20}\left[3(.95+.1 i)^{2}-4(.95+.1 i)+2\right] \\
& 3(.95+.1 i)(.95+.1 i) \\
& 2.7075+.57 i+.03 i^{2}-3.8-.4 i+2 \\
& \sum_{i=1}^{20}\left(.03 i^{2}+.17 i+.9075\right) \\
& =.03 \sum_{i=1}^{20} i^{2}+.17 \sum_{i=1}^{20} i+\sum_{i=1}^{20} .9075 \\
& =.03\left(\frac{20(21)(41)}{6}\right)+.17\left(\frac{20(21)}{2}\right)+.9075(20) \\
& =139.95 \\
& \text { p. 360-361 } \\
& 1-31 \text { odd, } 35,37 \\
& \text { 才 2 } \\
& \underbrace{\sum_{i=1}^{n} f\left(x_{i}\right) \sum_{\text {multiply }}^{n} \Delta x}_{\text {ex. 647 }}
\end{aligned}
$$

