Multiply each x_i, $i = 1, 2, ..., n$ by the same constant c. The results for the OLS coefficients is the following:

$$\begin{aligned}
\widetilde{\beta} &= \frac{\sum (cx_i - c\overline{x})(y_i - \overline{y})}{\sum (cx_i - c\overline{x})^2} \\
&= \frac{c\sum (x_i - \overline{x})(y_i - \overline{y})}{c^2 \sum (x_i - \overline{x})^2} \\
&= \frac{1}{c}\widehat{\beta} \\
\widetilde{\alpha} &= \overline{y} - \widetilde{\beta} c\overline{x} \\
&= \overline{y} - \frac{1}{c}\widehat{\beta} c\overline{x} \\
&= \overline{y} - \widehat{\beta}\overline{x} \\
&= \widehat{\alpha}
\end{aligned}$$

The slope coefficient is divided by c, but the intercept does not change.

Multiply each y_i, $i = 1, 2, ..., n$ by the same constant c. The results for the OLS coefficients is the following:

$$\begin{aligned}
\widetilde{\beta} &= \frac{\sum (x_i - \overline{x})(cy_i - c\overline{y})}{\sum (x_i - \overline{x})^2} \\
&= \frac{c\sum (x_i - \overline{x})(y_i - \overline{y})}{\sum (x_i - \overline{x})^2} \\
&= c\widehat{\beta} \\
\widetilde{\alpha} &= c\overline{y} - \widetilde{\beta}\overline{x} \\
&= c\overline{y} - c\widehat{\beta}\overline{x} \\
&= c\left(\overline{y} - \widehat{\beta}\overline{x}\right) \\
&= c\widehat{\alpha}
\end{aligned}$$

Both the slope and the intercept coefficient are multiplied by c.

Handout #3 -- The Effects of Changing Units of Measurement on OLS Statistics (Wooldridge -- Section 2.4)

y	x	(yi-yb)(xi-xb)	(xi-xb)2
5	1	1.23	4.2025
4	6	-4.72	8.7025
7	2	-1.47	1.1025
4	4	-1.52	0.9025
6	5	0.78	3.8025
5	4	-0.57	0.9025
7	1	-2.87	4.2025
4	3	0.08	0.0025
8	2	-2.52	1.1025
6	5	0.78	3.8025
9	4	3.23	0.9025
5	1	1.23	4.2025
4	2	1.68	1.1025
5	4	-0.57	0.9025
7	2	-1.47	1.1025
8	3	-0.12	0.0025
4	4	-1.52	0.9025
2	2	3.78	1.1025
5	1	1.23	4.2025
7	5	2.73	3.8025
Mean	Mean	Sum	Sum
5.6	3.05	-0.6	46.95

alpha = 5.638978
beta = -0.01278

y	x	(yi-yb)(xi-xb)	(xi-xb)2
5	10	12.3	420.25
4	60	-47.2	870.25
7	20	-14.7	110.25
4	40	-15.2	90.25
6	50	7.8	380.25
5	40	-5.7	90.25
7	10	-28.7	420.25
4	30	0.8	0.25
8	20	-25.2	110.25
6	50	7.8	380.25
9	40	32.3	90.25
5	10	12.3	420.25
4	20	16.8	110.25
5	40	-5.7	90.25
7	20	-14.7	110.25
8	30	-1.2	0.25
4	40	-15.2	90.25
2	20	37.8	110.25
5	10	12.3	420.25
7	50	27.3	380.25
Mean	Mean	Sum	Sum
5.6	30.5	-6	4695

alpha = 5.638978
beta = -0.001278

y	x	(yi-yb)(xi-xb)	(xi-xb)2
50	1	12.3	4.2025
40	6	-47.2	8.7025
70	2	-14.7	1.1025
40	4	-15.2	0.9025
60	5	7.8	3.8025
50	4	-5.7	0.9025
70	1	-28.7	4.2025
40	3	0.8	0.0025
80	2	-25.2	1.1025
60	5	7.8	3.8025
90	4	32.3	0.9025
50	1	12.3	4.2025
40	2	16.8	1.1025
50	4	-5.7	0.9025
70	2	-14.7	1.1025
80	3	-1.2	0.0025
40	4	-15.2	0.9025
20	2	37.8	1.1025
50	1	12.3	4.2025
70	5	27.3	3.8025
Mean	Mean	Sum	Sum
56	3.05	-6	46.95

alpha = 56.38978
beta = -0.127796

Multiplying xi, i=1,2,..,n by the same constant c will not change the intercept, but will give a new slope coefficient equal to the former divided by c
Multiplying yi, i=1,2,..,n by the same constant c will give both new intercept and slope coefficients, specifically each will be equal to the former multiplied by c