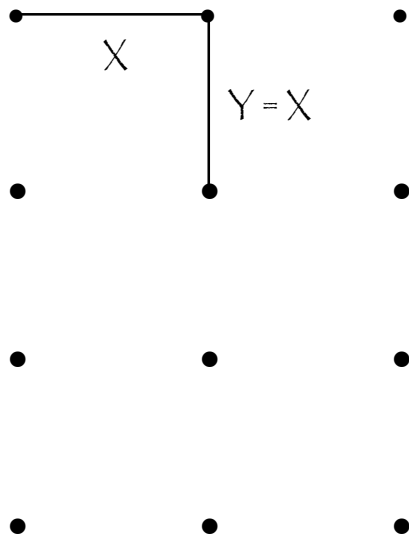


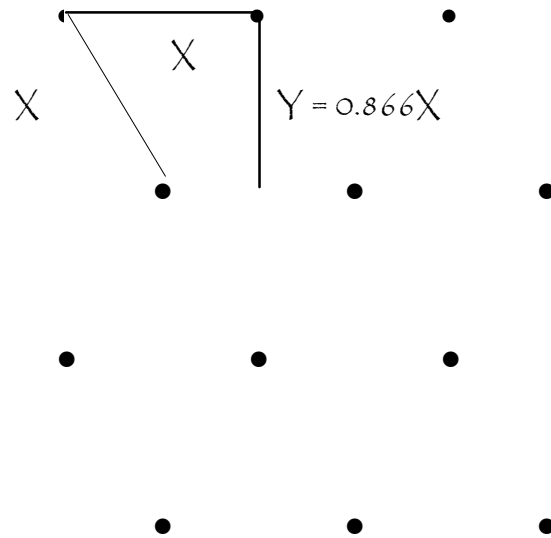
Calculating Plant Spacing and the Number of Plants Needed for a Given Area

2 Patterns for Planting

A. Square



B. Triangular



For **SQUARE** planting patterns, the distance between plants within the rows (X) equals the distance between rows (Y).

For **TRIANGULAR** planting patterns, the distance between plants within and between rows equals X , but the distance between rows (Y) equals $0.866X$.

SPACE NEEDED BY EACH PLANT

To determine the total space needed by each plant, multiply the distance between plants within the rows (X) by the distance between the rows (Y).

Examples

A. For a square planting pattern with plants spaced 6" on center (O.C.), X = 6 and Y = 6. Therefore, $6 \times 6 = 36 \text{ in}^2$.

B. For a triangular planting pattern with plants spaced 6" O.C., X = 6 and Y = 5.2. Therefore, $6 \times 5.2 = 31.2 \text{ in}^2$.

TOTAL NUMBER OF PLANTS NEEDED FOR A GIVEN AREA

1. Take the total number of square feet of planting area and multiply it by 144 to convert square feet to square inches.
2. Divide the total number of square inches by the total number of inches needed by each plant.

Examples

A. For a square planting pattern with plants spaced 6" on center (O.C.), each plant needs 36 square inches. The total square footage of the planting area is 100 ft².

$$\begin{array}{ll} \text{Step 1} & 100 \times 144 = 14,400 \text{ in}^2. \\ \text{Step 2} & 14,400 \div 36 \text{ in}^2 = 400 \text{ plants.} \end{array}$$

B. For a triangular planting pattern with plants spaced 6" O.C., each plant needs 31.2 square inches. The total square footage of the planting area is 100 ft².

$$\begin{array}{ll} \text{Step 1} & 100 \times 144 = 14,400 \text{ in}^2. \\ \text{Step 2} & 14,400 \div 31.2 \text{ in}^2 = 462 \text{ plants.} \end{array}$$