

Fertilizer Calculations

You have just bought a 30 lb. bag of Green Farmer Organic Fertilizer 5 - 3 - 3.

Q1. How many pounds of nitrogen are in this bag?

Q2. Your soil sample analysis recommends applying 1 pound of actual nitrogen/1000 sq. ft. How many sq. ft. will this bag cover?

Q3. Your garden measures 120 ft. by 60 ft. How many pounds of 5 - 3 - 3 fertilizer do you use to apply 1 lb. of actual nitrogen/1000 sq. ft. as recommended?

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5 - 3 - 3.

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$(.05 \text{ N}) (30 \text{ lbs.}) = 1.5 \text{ lbs. Actual nitrogen}$

Q2. Your soil sample analysis recommends applying 1 pound of actual nitrogen/1000 sq. ft.

How many sq. ft. will this bag cover?

$$\frac{1 \text{ lb.} = 1,000 \text{ sq. ft.}}{1.5 \text{ lbs.} \quad X \text{ sq. ft.}} \quad X = 1,500 \text{ sq. ft.}$$

Q3. Your garden measures 120 ft. by 60 ft.

How many pounds of 5 - 3 - 3 fertilizer do you use to apply 1 lb. of actual nitrogen/1000 sq. ft. as recommended?

$$(120 \text{ ft.}) (60 \text{ ft.}) = 7,200 \text{ sq. ft.}$$

30 lbs. covers 1,500 sq. ft.

$$7,200/1,500 = 4.8 \text{ bags}$$

$$\text{At } 30 \text{ lbs/bag} \times 4.8 \text{ bags} = 144 \text{ lbs.}$$