

## 2009 National Floriculture Career Development Event

### Problem Four

Assume you are asked to determine and adjust the pH of a batch of growing media that is to be used to pot 300 geraniums in 12 inch pots.

The growing media is to contain:

- 55% sphagnum peat
- 25% washed sand
- 20% perlite

The mixture has a pH of 4.3 and you know 2 pounds of finely ground limestone are required to bring about a 1 pH unit change per cubic yard of growing media.

Round all numbers up.

- 1) How many cubic feet of growing media will be required?
  - 2) How many cubic feet of sphagnum peat will be required?
  - 3) How many cubic feet of washed sand will be required?
  - 4) How many cubic feet of perlite will be required?
  - 5) How many pounds of fine ground limestone will you add to the growing media to bring the pH up to 5.8?
- A.
1. 188 1cubic feet
  2. 104 cubic feet
  3. 47 cubic feet
  4. 38 cubic feet
  5. 564 pounds
- B.
1. 188 cubic feet
  2. 104 cubic feet
  3. 47 cubic feet
  4. 38 cubic feet
  5. 48 pounds
- C.
1. 160 cubic feet
  2. 88 cubic feet
  3. 400 cubic feet
  4. 320 cubic feet
  5. 480 pounds
- D.
1. 188 cubic feet
  2. 104 cubic feet
  3. 47 cubic feet
  4. 38 cubic feet
  5. 21 pounds

## Number of Standard Pots That Can be Filled from 1 Cubic Foot of Growing Media

Pot Size (inches)	Number Filled/Cubic Foot of Media
2.25	296
2.50	176
3.00	120
4.00	44
5.00	24
6.00	14
7.00	9
8.00	5.6
12.00	1.6

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**Note: Cubic feet are converted to cubic yards.**