



PREVI...



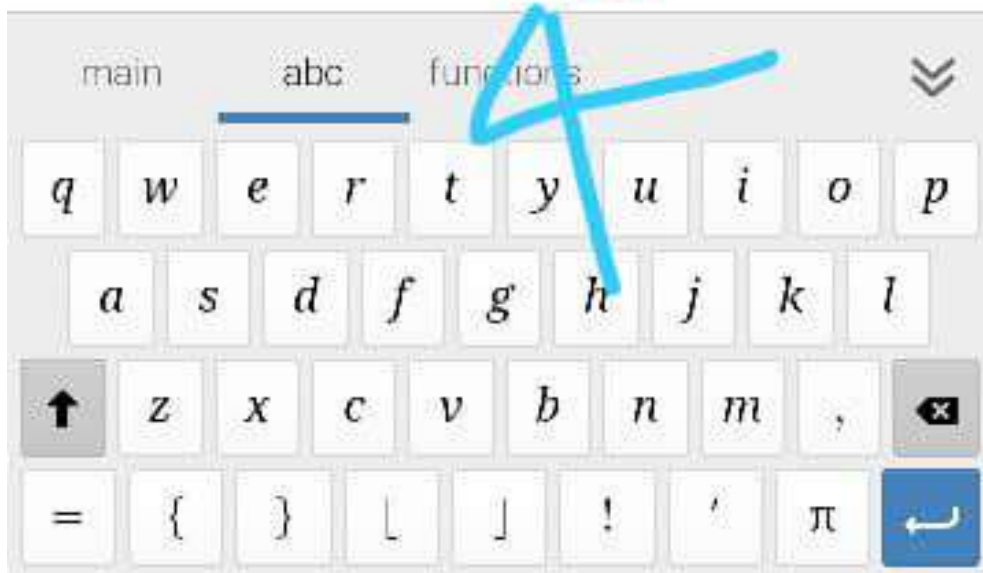
6 of 13

Next &gt;

 $\vec{AB}$ : Use  $t$  for the parameter $\vec{AC}$ : Use  $s$  for the parameter**Note:**

There are infinite correct answers to the question, but for our purposes, use a starting point for the proper interpretation of the graph.

| Parametric Equation | $x$      | $y$     | $z$  |
|---------------------|----------|---------|------|
| $\vec{AB}$          | $3.7t^3$ | $19.5t$ | $4t$ |
| $\vec{AC}$          | $3.7t^3$ | $20t^2$ | $5t$ |

Reset



PREVI...



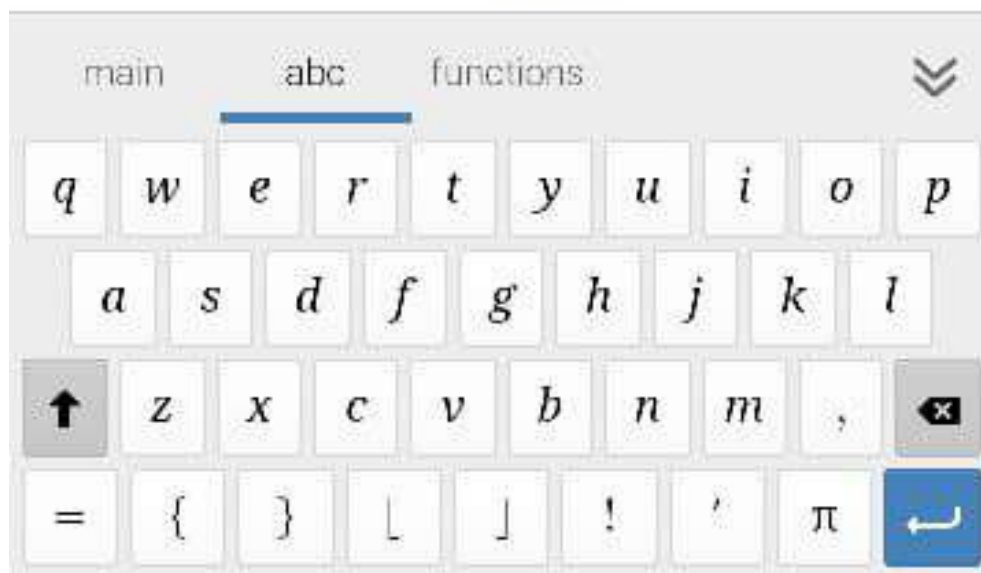
6 of 13

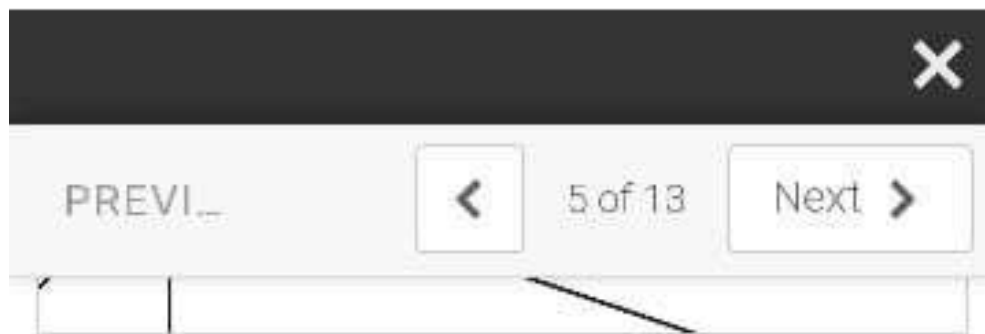
Next &gt;

 $\vec{AB}$ : Use  $t$  for the parameter $\vec{AC}$ : Use  $s$  for the parameter**Note:**

There are infinite correct answers to the question, but for our purposes, use a starting point for the proper interpretation of the graph.

| Parametric Equation | $x$      | $y$     | $z$  |
|---------------------|----------|---------|------|
| $\vec{AB}$          | $3.7t^3$ | $19.5t$ | $4t$ |
| $\vec{AC}$          | $3.7t^3$ | $20t^2$ | $5t$ |

[Reset](#)



Pick a random 3-D coordinate at the front of your box, and two random coordinates on the back of the box. These will be your two starting vectors. These points are A, B and C. (See diagram - Slide 3).

Points B and C can not have the same y-value or z-value. They will have the same negative x-value.

Your coordinates are:

A:  $(-6.7, 16.5, 7.5)$

B:  $(-6.7, 17.5, 8.5)$

C:  $(-6.7, 18.5, 9.5)$

| Point | x    | y    | z   |
|-------|------|------|-----|
| A     | -6.7 | 16.5 | 7.5 |
| B     | -6.7 | 17.5 | 8.5 |
| C     | -6.7 | 18.5 | 9.5 |

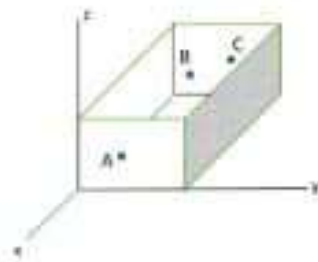
✕

PREVI\_ < 4 of 13 Next >



### Step 2: Mark the Points

Mark point A at the front of your box and points B and C on the back of the box. These will be your two starting vectors. (See diagram).



Measure the dimensions of the box you are going to use, and record your dimensions in the table below:

x- value (depth of a box) **will be negative:**

y- value (width of a box):

z- value (height of a box):

| Box Dimensions: | $x$  | $y$  | $z$ |
|-----------------|------|------|-----|
| <i>in(CM)</i>   | -6.7 | 18.5 | 9.5 |

