

Trial and Improvement: Step-by-step 1

Name:			Date:
Which of the coning a con-	- d : d		Correct Answer: A B C D
Which of these is a goo solve this equation by			
			Explanation:
A) Try x = 5.5	$Vex^2 - x = 27$ (to 1 d.p)		
x	x ² - x	27	
	5² - 5 = 20	too small	
1	62 - 6 = 30	too big	
C) Try x = 4			
D) Try x = 7			
D) Hy X = 7			
			1
Which of these is a goo	nd idea for the next	ton to	Correct Answer: A B C D
Which of these is a good idea for the next step to solve this equation by trial and improvement?			Fundametica
	<u> </u>		Explanation:
A) Try x = 5.4	Solve $x^2 - x = 27$ (to 1 d.p)		
x	x ² - x	27	
B) Try $x = 5.501$	5 ² - 5 = 20	too small	
6	$6^2 - 6 = 30$	too big	
C) Try $x = 5.6$ 5.5	5.5 ² - 5.5 = 24.75	too small	
D) T 7			
D) Try x = 7			
			J
			1
What is the best next s	tep to solve this equ	ation	Correct Answer: A B C D
by trial and improveme	ent?		Explanation:
A) Try $x = 5.71$	Solve $x^2 - x = 27$ (to 1 d.	p)	
	x x2-x	27	
B) No more to do as	5 52 - 5 = 20	too small	
you know the answer	6 6 ² - 6 = 30	too big	
is x = 5.7	5.5 5.5 ² - 5.5 = 24.75 5.6 5.6 ² - 5.6 = 25.76	too small	
C) Tm = 5 75	5.7 5.7 ² - 5.7 = 26.79	too small	
C) Try $x = 5.75$	5.8 5.8 ² - 5.8 = 27.84	too big	
D) Keep trying x	1	1	
values until you get as			
close to 27 as possible			

A) You don't know as	S	solve $x^2 - x = 27$ (to 1 d.p)	
you have not got an	x	x2 - x	27
answer of 27 yet	5	52 - 5 = 20	too small
•	6	62 - 6 = 30	too big
D) F 7	5.5	5.5 ² - 5.5 = 24.75	too small
B) $x = 5.7$	5.6	5.6 ² - 5.6 = 25.76	too small
	5.7	5.7 ² - 5.7 = 26.79	too small
C) $x = 5.75$	5.8	5.82 - 5.8 = 27.84	too big
-1	5.75	5.752 - 5.75 = 27.3125	too big

Correct Answer: A B C D
Explanation: