Question 1

2010 HSG Mathematics

Band 3/4

Sample 2 Start here for Question Number: x = 4x a - 4x = 0 x - 4=0 Y = 0 X-4 =0 or × = 4 $\chi = 0.4$ b a+ 655 5-2 J5+2 JSt Z a + 655 athus 55-2 552 (55+2) 55+2 5 5+25-25-4 JETZ 6.F 3 1 2+55 = a+h55-:. a = Z 6 = c) $(x - h)^{2} + (y - k)^{2} = r^{2}$ $= (x + 1)^{2} + (y - 2)^{2} = 25$

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Sample 2 |2x+3| = 9-(2x+3) = 9 * When z=-6 + When = 3 2x + 3 = 92x = 6 -2×-3 =1 $|2_{x3}+3|=9$ 2-6-31=7 -2x = 12 76 = 3 91 = 9 9 =9 = 9 9 x = -69 2 9 1. 2=3 ', x = -6·. x= 3, -6 x tan x e) y = 2 re see $+\frac{1}{9}-\frac{1}{27}+$ 9=1 Snoo τ a 1-1 r = -3 1 3 1+3 1/4 . Limiting som is 14 -> Sericicle > r = 4 $(x) = \sqrt{x} - 8$ 9 ceter = (0,0) : Dom: : -4 5x54 Additional writing space on back page. Office Use Only - Do NOT write anything, or make any marks below this line.