Evaluate the following limits. **Show your work**.

1. 
2. 
3. 
4. $\lim\_{x\to -5^{-}}\frac{\sqrt{\left(x+5\right)^{2}}}{x+5}$
5. 
6. 
7. 
8. 
9. 
10. 
11. $\lim\_{x \to -1}\left[3x^{4}-2x+10\right]=$
12. 
13. 
14. 
15. 
16. $\lim\_{x \to + \infty }\left[\frac{20x^{50}+20x^{44}+640}{10x^{44}+6x^{25}-320}\right]=$
17. 
18. 
19. 
20. 
21. $\lim\_{x \to - \infty }\left[\frac{5x^{5}+2x^{2}+6}{10x^{7}+x^{3}-3}\right]=$
22. 
23. 
24. 
25. 
26. If  find  **Show your work**.
27. 







1. 
2. Find the discontinuities of. $f\left(x\right)=\frac{2}{2π-3cos^{-1}x}$
3. Find the discontinuities of .
4. Find the values of  at which  is not continuous and determine if they are removable discontinuities at those points.
5. What value of will make continuous? $g\left(x\right)=\left\{\begin{array}{c}\frac{x^{3}+5x^{2}+x+5}{x+5}, x\ne -5\\ k , x= -5\end{array}\right.$

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| imageFor the function http://edugen.wileyplus.com/edugen/courses/crs6414/anton9780470647691/c01/math/math001.gif graphed in the accompanying figure, find |

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| (a)  http://edugen.wileyplus.com/edugen/courses/crs6414/anton9780470647691/c01/math/math116.gif |  |

|  |  |
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| (b)   | http://edugen.wileyplus.com/edugen/courses/crs6414/anton9780470647691/c01/math/math117.gif |
| (c)   | http://edugen.wileyplus.com/edugen/courses/crs6414/anton9780470647691/c01/math/math118.gif |

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| (d)   | http://edugen.wileyplus.com/edugen/courses/crs6414/anton9780470647691/c01/math/math119.gif |
| (e)   | http://edugen.wileyplus.com/edugen/courses/crs6414/anton9780470647691/c01/math/math134.gif |

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| (f)   | http://edugen.wileyplus.com/edugen/courses/crs6414/anton9780470647691/c01/math/math135.gif |

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