Limits Review III

1. $\displaystyle\lim_{x \to 2} \frac{x^3 - 8}{x^2 - 4}$

5. $\displaystyle\lim_{x \to a^-} \frac{|x - a|}{x^2 - a^2}$

2. $\displaystyle\lim_{x \to \infty} \frac{1}{3^{-x}}$

6. $\displaystyle\lim_{h \to 0} \frac{(1 + h)^6 - 1}{h}$

3. $\displaystyle\lim_{x \to \infty} \sin^2 x$

7. $\displaystyle\lim_{x \to -\frac{1}{2}} \lfloor 3x \rfloor$

4. $\displaystyle\lim_{x \to a^+} \frac{|x - a|}{x^2 - a^2}$

1

8. $\displaystyle\lim_{x\to\infty}\frac{3x+4}{\sqrt{2x^2-5}}$

9. $\displaystyle\lim_{x\to\infty}\frac{\sqrt{1+x}}{\sqrt{9x-1}}$

10. $\displaystyle\lim_{x\to\infty}\left(\sqrt{x^2+3x}-x\right)$

11. $\displaystyle\lim_{x\to\infty}\left(2x-\sqrt{4x^2-5x}\right)$

12. $\displaystyle\lim_{x\to\infty}x^2\sin\left(\frac{1}{x}\right)$