Compute these limits.

1. $\lim_{x\to\infty} -3x^4 + 7x^3 + 6 = -\infty$
2. $\lim_{x\to-\infty} -3x^4 + 7x^3 + 6 = -\infty$
3. $\lim_{x\to\infty} -6x^9 - 7x^6 + 2 = -\infty$
4. $\lim_{x\to-\infty} -6x^9 - 7x^6 + 2 = \infty$
5. $\lim_{x\to\infty} \frac{6x^3-5x^2+1}{3x+7} = \infty$
6. $\lim_{x\to\infty} \frac{-3x^5+7x^2+7}{2x^2+5} = -\infty$
7. $\lim_{x\to-\infty} \frac{-3x^5+7x^2+7}{2x^2+5} = \infty$
8. $\lim_{x\to-\infty} \frac{-3x^7-4x^3+7}{x^3+10} = -\infty$
9. $\lim_{x\to\infty} 4 * (.75)^x = 0$
10. $\lim_{x\to-\infty} 4 * (.75)^x = \infty$
11. $\lim_{x\to\infty} 5e^{2x} = \infty$
12. $\lim_{x\to-\infty} 5e^{2x} = 0$
13. $\lim_{x\to\infty} f(x) = 0$, where
$$f(x) = \begin{cases} \frac{3x^2+5x+4}{4x^2+7} & \text{if } x \le 1 \\ e^{-.5x} & \text{if } x > 1 \end{cases}$$
14. $\lim_{x\to-\infty} f(x) = \frac{3}{4}$, where
$$f(x) = \begin{cases} \frac{3x^2+5x+4}{4x^2+7} & \text{if } x \le 1 \\ e^{-.5x} & \text{if } x > 1 \end{cases}$$
15. $\lim_{x\to\infty} f(x) = \infty$, where
$$f(x) = \begin{cases} 4 * (1.05)^x & \text{if } x < 0 \\ \frac{6x^4+18}{5x^2+2} & \text{if } x \ge 0 \end{cases}$$
16. $\lim_{x\to-\infty} f(x) = 0$, where
$$f(x) = \begin{cases} 4 * (1.05)^x & \text{if } x < 0 \\ \frac{6x^4+18}{5x^2+2} & \text{if } x \ge 0 \end{cases}$$