Evaluate each limit

1. $$\lim_{x \to -1} 5$$

2. $$\lim_{x \to \frac{3}{2}} -\sqrt{2x+4}$$

3. $$\lim_{x \to 4} \frac{x^2 + 3x}{x^2 - x - 12}$$

4. $$\lim_{h \to 0} \frac{(2+h)^3 - 8}{h}$$

5. Given an example of a quadratic function with a limit that evaluates to 4.

6. Suppose that

$$\lim_{x \to 1^-} f(x) = 3$$

and

$$\lim_{x \to 1^+} f(x) = 7$$

Then is it possible for $\lim_{x \to 1} f(x)$ to exists? Explain.