## Quiz 10

Name: \_\_\_\_\_

1. Find the derivatives of the following functions. [You may use shortcuts.]

(a) 
$$f(x) = x^5$$

(c) 
$$h(t) = 14\sqrt{t}$$

(b) 
$$g(x) = \frac{1}{x^2}$$

(d) 
$$r(t) = \sqrt[3]{t^2}$$

2. Why can you not immediately apply the power rule to the function  $\frac{1}{x^2}$  and get  $\frac{1}{2x^1}$  for its derivative?