

2.7  $h(x) = (f \circ g)(x)$

9.  $h(x) = \cos(2x-7)$

$f(x) = \cos x$

$g(x) = 2x-7$

10.  $h(x) = 5^{x^2+x^2-1}$

$f(x) = 5^x$

$g(x) = x^2+x^2-1$

11.  $h(x) = \frac{1}{x^2-4}$

$f(x) = \frac{1}{x}$

$g(x) = x^2-4$

12.  $h(x) = |2x^2-3x|$

$f(x) = |x|$

$g(x) = 2x^2-3x$

13.  $h(x) = 5(x^2+1)^{10}$

$f(x) = 5x^{10}$

$g(x) = x^2+1$

14.  $h(x) = (3x+5)^{3/4}$

$f(x) = x^{3/4}$

$g(x) = 3x+5$

15.  $h(x) = \sqrt{\tan x}$

$f(x) = \sqrt{x}$

$g(x) = \tan x$

16.  $h(x) = \log_3(x^4-3x)$

$f(x) = \log_3 x$

$g(x) = x^4-3x$

$H(x) = (f \circ g \circ h)(x)$   
17.  $H(x) = 6(x^2-3x)^{11}$

$f(x) = 6x$

$g(x) = x^{11}$

$h(x) = x^2-3x$

18.  $H(x) = [\sin(2x+\pi)]^4$

$f(x) = x^4$

$g(x) = \sin x$

$h(x) = 2x+\pi$

19.  $H(x) = 8 \log_6(x^2+4x)$

$f(x) = 8x$

$g(x) = \log_6 x$

$h(x) = x^2+4x$

20.  $H(x) = \sqrt{\frac{1}{x}+7}$

$f(x) = \sqrt{x}$

$g(x) = \frac{1}{x}+7$

$h(x) = \frac{1}{x}$