

Warm-up

$$\textcircled{1} 5^{2/3} \cdot 5^{1/2}$$

$$\textcircled{3} (6^{2/3} \cdot 4^{1/3})^2$$

$$\textcircled{4} (4^5 \cdot 3^5)^{-1/5}$$

$$\textcircled{9} \frac{3^{5/4}}{3}$$

6.4 Special Functions

$$f(x) = 2x + 1$$

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

$$\textcircled{1} g(f(0))$$

$$\textcircled{2} f(g(1))$$

$$\textcircled{3} g(f(1))$$

$$f: 2(0) + 1$$

$$g: \frac{1-1}{2} = \frac{0}{2}$$

$$f:$$

$$g: \frac{1-1}{2} = \frac{0}{2} = \textcircled{0}$$

$$f: 2(0) + 1 = \textcircled{1}$$

$$g:$$

$$g(f(12)) =$$

Humm... are getting same #
as you started

How about

$$f(x) = x - 6$$

* take a # & subtract 6

$$\textcircled{1} g(f(-2))$$

f:
g:

$$\textcircled{3} f(g(x))$$

g:

f:

$$g(x) = x + 6$$

* take # & add 6

$$\textcircled{2} f(g(-2))$$

f:

g:

$$\textcircled{4} g(f(x))$$

f:

g:

$$f(x) = 2x$$

$$\textcircled{1} g(f(r))$$

f:

g:

$$g(x) = \frac{x}{2}$$

$$\textcircled{2} f(g(r))$$

g:

f: