

Comprehensive Review #2

Topics:

Lesson 21 - Evaluating Functions

Lesson 34 - Decomposing Functions

Lesson 38 - Designated Roots

[1] [D]

[2] [C]

[3] -1

[4] $x^2 + 2hx + x + h^2 + h + 2$

[5] $4hx + 2h^2 - 3h$

[6] $\frac{-h}{2x^2 + 2hx}$

[7] $2x + h$

[8] $D = \{x \in \mathbf{R} \mid x \geq -\frac{3}{5}\}$

[9] $\{x \in \mathbf{R} \mid x \geq -9, x \neq 1, 4\}$

Domain = $\{x \in \mathbf{R} \mid -5 \leq x < 8\}$

[10] Range = $\{y \in \mathbf{R} \mid -10 < x \leq 9\}$

[11] [C]

[12] [A]

[13] [A] _____

[14] [C] _____

[15] [C] _____

[16] [D] _____

[17] $f(x) = \sqrt[4]{x}$ $g(x) = x^3 - 5$ Other, less obvious, answers are not given.

[18] $f(x) = \frac{1}{x}$ $g(x) = x^3 + 3$ Other, less obvious, answers are not given.
