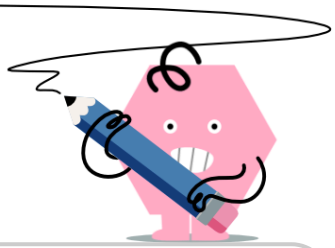
Name

Function Composition - Inputs to Composite Function



1

given:

$r(x) = 2x^2 + 4x + 1$

$y(x) = 4\log -3x$

$y(r(x)) = ?$

Find the composite function of y(r(x))?

A $y(r(x)) = 4\log -3(2x^2 + 4x + 1)$

B $y(r(x)) = 2(4\log -3x)^2 + 4(4\log -3x) + 1$

2

given:

$n(x) = 5 \cdot x^2$

$r(x) = 3\sqrt{-2x}$

$r(n(x)) = ?$

Find the composite function of r(n(x))?

A $r(n(x)) = 3\sqrt{-2(5 \cdot x^2)}$

B $r(n(x)) = 5 \cdot (3\sqrt{-2x})^2$

3

given:

$b(x) = -1^{2x}$

$m(x) = 4x^2 - 3x + 3$

$b(m(x)) = ?$

Find the composite function of b(m(x))?

A $b(m(x)) = 4(-1^{2x})^2 - 3(-1^{2x}) + 3$

B $b(m(x)) = -1^{2(4x^2-3x+3)}$

4

given:

$b(x) = -5 \cdot x^2$

$d(x) = 3^{4x}$

$b(d(x)) = ?$

Find the composite function of b(d(x))?

A $b(d(x)) = -5 \cdot (3^{4x})^2$

B $b(d(x)) = 3^{4(-5 \cdot x^2)}$

5

given:

$z(x) = 2^{-3x}$

$m(x) = -5\sqrt{-2x}$

$m(z(x)) = ?$

Find the composite function of m(z(x))?

A $m(z(x)) = 2^{-3(-5\sqrt{-2x})}$

B $m(z(x)) = -5\sqrt{-2(2^{-3x})}$

6

given:

$p(x) = -1\sqrt{-2x}$

$b(x) = 5x^3 - 5x^2 - 2x$

$p(b(x)) = ?$

Find the composite function of p(b(x))?

A $p(b(x)) = -1\sqrt{-2(5x^3 - 5x^2 - 2x)}$

B $p(b(x)) = 5(-1\sqrt{-2x})^3 - 5(-1\sqrt{-2x})^2 - 2(-1\sqrt{-2x})$

7

given:

$b(x) = -2^{2x}$

$r(x) = 4\log -4x$

$b(r(x)) = ?$

Find the composite function of b(r(x))?

A $b(r(x)) = -2^{2(4\log -4x)}$

B $b(r(x)) = 4\log -4(-2^{2x})$

8

given:

$r(x) = 2\sqrt{-5x}$

$d(x) = 3 \cdot x^2$

$r(d(x)) = ?$

Find the composite function of r(d(x))?

A $r(d(x)) = 3 \cdot (2\sqrt{-5x})^2$

B $r(d(x)) = 2\sqrt{-5(3 \cdot x^2)}$