

SM2 HW #9-2 (Composition of Functions)

Date _____ Period _____

Perform the indicated operation.

1) $g(n) = n^3 + 5n^2$
 $f(n) = n - 1$
 Find $(2g + 2f)(n)$

2) $h(n) = 2n - 3$
 $g(n) = -2n^3 + n$
 Find $(h - g)(n)$

3) $h(x) = x^2 + 1$
 $g(x) = 3x + 2$
 Find $(3h - g)(1)$

4) $g(x) = -x^2 + 4x$
 $h(x) = -4x - 1$
 Find $(3g + h)(-3)$

5) $g(n) = 2n - 2$
 $h(n) = n^2 + 3n$
 Find $(g \circ h)(n)$

6) $f(a) = a + 2$
 $g(a) = a^2 - 3a$
 Find $(f \circ g)(a)$

7) $f(t) = 2t - 4$
 $g(t) = t^3 - 3t$
 Find $(f \circ g)(t)$

8) $h(t) = 2t - 1$
 $g(t) = t^3 + 2$
 Find $(h \circ g)(t)$

9) $f(a) = a - 4$
 $g(a) = a^3 + 3$
 Find $(f \circ g)(0)$

10) $f(x) = x - 3$
 Find $(f \circ f)(10)$

11) $f(n) = 4n - 2$
 $g(n) = 2n + 3$
 Find $(f \circ g)(-8)$

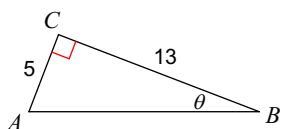
12) $g(a) = a - 1$
 $f(a) = 3a - 1$
 Find $(g \circ f)(1)$

13) $h(a) = 4a + 1$
 $g(a) = 2a - 5$
 Find $(h \circ g)(-9)$

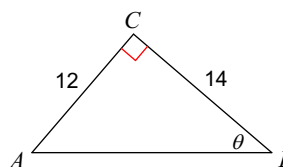
14) $h(a) = a^2 - 5a$
 $g(a) = 3a + 1$
 Find $(h \circ g)(-2)$

Find the measure of each angle indicated. Round to the nearest tenth.

15)

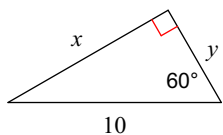


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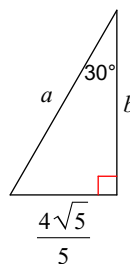


Find the missing side lengths. Leave your answers as radicals in simplest form.

17)

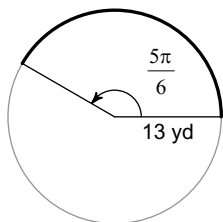


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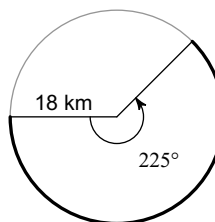


Find the length of each arc.

19)

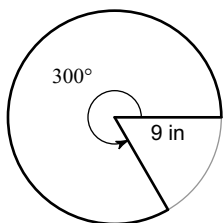


20)



Find the area of each sector.

21)



22)

