7) $g(x) = x + 5$
$f(x) = x^2 - 2x$
Find $\left(\frac{g}{f}\right)(x)$

8) $g(x) = -x - 4$
$f(x) = 2x + 2$
Find $(g \circ f)(-10)$

9) $g(x) = 4x + 2$
$h(x) = x^2 + 5$
Find $(g \cdot h)(x)$

10) $g(a) = 4a + 1$
$h(a) = 2a - 4$
Find $(g + h)(a)$

11) $f(x) = x + 2$
$g(x) = x^2 + 5$
Find $(f + g)(x)$

12) $g(n) = n^3 - 2n^2$
$f(n) = 2n + 4$
Find $(g \circ f)(1)$

13. **Geometry** You toss a pebble into a pool of water and watch the circular ripples radiate outward. You find that the function $r(x) = 12.5x$ describes the radius r in inches of a circle x seconds after it was formed. The function $A(x) = \pi x^2$ describes the area A of a circle with radius x.
a. Find $(A \circ r)(x)$ when $x = 2$. Interpret your answer.
b. Find the area of a circle 4 seconds after it was formed.