

## The Difference Quotient

$$\frac{f(x+h) - f(x)}{h}$$

Evaluate the difference quotient for the problems below.

1. $g(x) = 3x - 4$	2. $f(x) = x^2 + x$	3. $s(x) = 7x^2 + 2x + 4$	4. $m(x) = x^3 + 2x$
5. $n(x) = x^2 - 3x$	6. $h(x) = \frac{1}{x} + 3x$	7. $a(x) = 3x^2 - 8x$	8. $b(x) = -4x^2 - x$