Multiplying and Dividing Functions

Perform the indicated operation.

1) $h(x) = 5x$
$g(x) = -10x^3 + 10x^2$
Find $(\frac{g}{h})(x)$

2) $h(x) = 10x$
$g(x) = 6x + 4$
Find $(h.g)(3)$

3) $h(x) = 11x$
$g(x) = 7x + 4$
Find $(h.g)(x)$

4) $h(x) = 6x$
$g(x) = -12x^3 + 18x^2$
Find $(\frac{g}{h})(x)$

5) $h(x) = 7x$
$g(x) = -21x^3 + 14x^2$
Find $(\frac{g}{h})(2)$

6) $h(x) = -7x$
$g(x) = 8x - 2$
Find $(h.g)(x)$

7) $h(x) = 2x$
$g(x) = 4x + 4$
Find $(h.g)(1)$

8) $h(x) = 9x$
$g(x) = -27x^3 + 36x^2$
Find $(\frac{g}{h})(x)$

9) $h(x) = 2x$
$g(x) = 8x^3 + 6x^2$
Find $(\frac{g}{h})(x)$

10) $h(x) = 3x$
$g(x) = 6x + 4$
Find $(h.g)(3)$

11) $h(x) = -5x$
$g(x) = 6x - 2$
Find $(h.g)(x)$

12) $h(x) = 2x$
$g(x) = 6x + 3$
Find $(h.g)(x)$

Answers of Multiplying and Dividing Functions

Perform the indicated operation.

1) $h(x) = 5x$
$g(x) = -10x^3 + 10x^2$
Find $(\frac{g}{h})(x)$
$(\frac{g}{h})(x) = -2x^2 + 2x$

2) $h(x) = 10x$
$g(x) = 6x + 4$
Find $(h \cdot g)(3)$
$(h \cdot g)(x) = 660$

3) $h(x) = 11x$
$g(x) = 7x + 4$
Find $(h \cdot g)(x)$
$(h \cdot g)(x) = 77x^2 + 44x$

4) $h(x) = 6x$
$g(x) = -12x^3 + 18x^2$
Find $(\frac{g}{h})(x)$
$(\frac{g}{h})(x) = -2x^2 + 3x$

5) $h(x) = 7x$
$g(x) = -21x^3 + 14x^2$
Find $(\frac{g}{h})(2)$
$(\frac{g}{h})(x) = -8$

6) $h(x) = -7x$
$g(x) = 8x - 2$
Find $(h \cdot g)(x)$
$(h \cdot g)(x) = -56x^2 + 14x$

7) $h(x) = 2x$
$g(x) = 4x + 4$
Find $(h \cdot g)(1)$
$(h \cdot g)(x) = 16$

8) $h(x) = 9x$
$g(x) = -27x^3 + 36x^2$
Find $(\frac{g}{h})(x)$
$(\frac{g}{h})(x) = -3x^2 + 4x$

9) $h(x) = 2x$
$g(x) = 8x^3 + 6x^2$
Find $(\frac{g}{h})(x)$
$(\frac{g}{h})(x) = 4x^2 + 3x$

10) $h(x) = 3x$
$g(x) = 6x + 4$
Find $(h \cdot g)(3)$
$(h \cdot g)(x) = 198$

11) $h(x) = -5x$
$g(x) = 6x - 2$
Find $(h \cdot g)(x)$
$(h \cdot g)(x) = -30x^2 + 10x$

12) $h(x) = 2x$
$g(x) = 6x + 3$
Find $(h \cdot g)(x)$
$(h \cdot g)(x) = 12x^2 + 6x$