

# Multiplying and Dividing Functions



Perform the indicated operation.

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

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

3)  $h(x) = 10x$   
 $g(x) = 30x^3 + 40x^2$   
Find  $(\frac{g}{h})(1)$

4)  $h(x) = -4x$   
 $g(x) = 2x - 3$   
Find  $(h \cdot g)(x)$

5)  $h(x) = 7x$   
 $g(x) = 8x + 3$   
Find  $(h \cdot g)(1)$

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

7)  $h(x) = -2x$   
 $g(x) = 4x - 3$   
Find  $(h \cdot g)(x)$

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

9)  $h(x) = 10x$   
 $g(x) = 8x + 3$   
Find  $(h \cdot g)(x)$

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

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

12)  $h(x) = -5x$   
 $g(x) = 6x - 2$   
Find  $(h \cdot g)(x)$

13)  $h(x) = 4x$   
 $g(x) = 16x^3 + 16x^2$   
Find  $(\frac{g}{h})(3)$

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

15)  $h(x) = 10x$   
 $g(x) = 20x^3 + 20x^2$   
Find  $(\frac{g}{h})(x)$

16)  $h(x) = 8x$   
 $g(x) = -24x^3 + 32x^2$   
Find  $(\frac{g}{h})(2)$

# Answers of Multiplying and Dividing Functions



Perform the indicated operation.

1)  $h(x) = 9x$   
 $g(x) = 4x + 2$   
Find  $(h \cdot g)(4)$   
 $(h \cdot g)(x) = 648$

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

3)  $h(x) = 10x$   
 $g(x) = 30x^3 + 40x^2$   
Find  $(\frac{g}{h})(1)$   
 $(\frac{g}{h})(x) = 7$

4)  $h(x) = -4x$   
 $g(x) = 2x - 3$   
Find  $(h \cdot g)(x)$   
 $(h \cdot g)(x) = -8x^2 + 12x$

5)  $h(x) = 7x$   
 $g(x) = 8x + 3$   
Find  $(h \cdot g)(1)$   
 $(h \cdot g)(x) = 77$

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

7)  $h(x) = -2x$   
 $g(x) = 4x - 3$   
Find  $(h \cdot g)(x)$   
 $(h \cdot g)(x) = -8x^2 + 6x$

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

9)  $h(x) = 10x$   
 $g(x) = 8x + 3$   
Find  $(h \cdot g)(x)$   
 $(h \cdot g)(x) = 80x^2 + 30x$

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

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

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

13)  $h(x) = 4x$   
 $g(x) = 16x^3 + 16x^2$   
Find  $(\frac{g}{h})(3)$   
 $(\frac{g}{h})(x) = 48$

14)  $h(x) = 6x$   
 $g(x) = -18x^3 + 12x^2$   
Find  $(\frac{g}{h})(4)$   
 $(\frac{g}{h})(x) = -40$

15)  $h(x) = 10x$   
 $g(x) = 20x^3 + 20x^2$   
Find  $(\frac{g}{h})(x)$   
 $(\frac{g}{h})(x) = 2x^2 + 2x$

16)  $h(x) = 8x$   
 $g(x) = -24x^3 + 32x^2$   
Find  $(\frac{g}{h})(2)$   
 $(\frac{g}{h})(x) = -4$