

Practice for Semester 1 Exam

Evaluate each function.

1) $f(a) = -2a - 4$; Find $f(4)$

2) $h(n) = -n^2 - 4n$; Find $h(n^2)$

Perform the indicated operation.

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

4) $g(t) = 3t + 5$
 $h(t) = t^3 - 2$
Find $(g \cdot h)(t)$

5) $f(n) = n^2 - 5$
 $g(n) = 2n + 4$
Find $f(g(n))$

6) $g(n) = n + 1$
 $h(n) = -2n^2 - n$
Find $g(h(n))$

Write the slope-intercept form of the equation of the line through the given points.

7) through: $(0, -4)$ and $(2, -3)$

8) through: $(-4, -4)$ and $(1, 5)$

Write the slope-intercept form of the equation of the line described.

9) through: $(3, 3)$, parallel to $y = 2x + 2$

10) through: $(2, -1)$, perp. to $y = -2x + 4$

Solve each system. Use Elimination by Substitution or Elimination by Addition.

11) $y = -2x - 3$
 $-3x - 8y = -15$

12) $y = -5x + 2$
 $-4x + 3y = 6$

13) $-7x + 7y = -14$
 $-9x - 7y = -2$

14) $9x + 5y = 26$
 $-x - 5y = 6$

Graph the solution to each system of inequalities.

15) $y > -x + 2$
 $y > -5x - 2$

16) $2x + 3y > 3$
 $2x - 3y < 9$

Answers to Practice for Semester 1 Exam

1) -12

5) $4n^2 + 16n + 11$

9) $y = 2x - 3$

13) $(1, -1)$

2) $-n^4 - 4n^2$

6) $-2n^2 - n + 1$

10) $y = \frac{1}{2}x - 2$

14) $(4, -2)$

3) $2n^3 - 4n - 2$

7) $y = \frac{1}{2}x - 4$

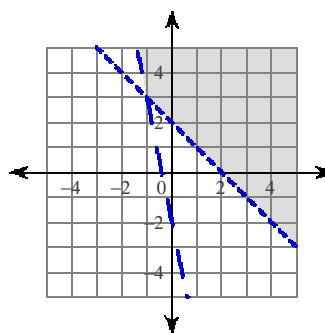
11) $(-3, 3)$

15)

4) $3t^4 + 5t^3 - 6t - 10$

8) $y = \frac{9}{5}x + \frac{16}{5}$

12) $(0, 2)$



16)

