

Standardized Test Prep

Multiple Choice

(50.)Which of the following equations has a graph that is narrower than the graph of $y = 2x^2 + 3$?

A.
$$y = 2x^2 - 3$$

C.
$$y = 2x^2 + 3$$

B.
$$y = -3x^2 + 2$$

D. $y = -0.5x^2 - 2$

51/Which of the following equations has a graph that crosses the y-axis at a point lower than the graph of $y = -2x^2 - 1$? **G.** $y = 3x^2 - 3$

F.
$$y = -3x^2 - 1$$

H.
$$y = -3x^2 + 1$$

1.
$$y = -3x^2 + 3$$

52.) The graph of $y = 4x^2 + 3$ does NOT pass through which of the following points?

C.
$$(-1, 7)$$

Mixed Review

Factor each expression. Lesson 9-8

$$(54)$$
 $x^3 - 4x^2 + 2x - 8$

55.
$$15a^3 - 18a^2 - 10a + 12$$

$$\begin{array}{c} (56) 7b^3 + 14b^2 + b + 2 \\ (58) 2n^3 - 2n^2 - 24n \end{array}$$

57.
$$y^3 + 3y^2 - 4y - 12$$

$$(58)$$
 $2n^3 - 2n^2 - 24n$

59.
$$30m^3 + 51m^2 + 9m$$

Simplify each expression. Lesson 9-2

60.
$$5x(3x-4)$$

61.
$$(n-7)9n$$

$$(62)$$
 $-2t^2(6t-11)$

63.
$$4m^2(3m^4-m^3+5)$$

64.
$$-5y(3y^5 + 2y^3 - 4y^3)$$

Simplify each expression.

60.
$$5x(3x - 4)$$

61. $(n - 7)9n$

62. $-2t^2(6t - 11)$

63. $4m^2(3m^4 - m^3 + 5)$

64. $-5y(3y^5 + 2y^3 - 4)$

65) $3c^3(-4c^2 + 7c - 8)$

66. Business The City Council invites your art club to sell helium balloons during a citywide celebration. The rental of the helium tank is \$27.00 for the day. Each balloon costs \$.20. If the balloons sell for \$2.00 each, how many will your art club have to sell to break even?