

Algebra 3 Summer Math Assignment - Show all work.
Answer Section

1. ANS: C PTS: 1 DIF: Level B REF: MALG1098
 NAT: NT.CCSS.MTH.10.9-12.A.SSE.3.c
 TOP: Lesson 7.1 Apply Exponent Properties Involving Products
 KEY: simplify | exponent | multiply | product rule MSC: DOK 1
 NOT: 978-0-547-31539-3
2. ANS: A PTS: 1 DIF: Level B REF: MALG1102
 NAT: NT.CCSS.MTH.10.9-12.A.SSE.3.c
 TOP: Lesson 7.1 Apply Exponent Properties Involving Products
 KEY: simplify | exponent | multiply | product rule MSC: DOK 1
 NOT: 978-0-547-31539-3
3. ANS: D PTS: 1 DIF: Level A REF: MALG1104
 NAT: NT.CCSS.MTH.10.9-12.A.SSE.3.c
 TOP: Lesson 7.1 Apply Exponent Properties Involving Products
 KEY: simplify | power rule | exponent MSC: DOK 1 NOT: 978-0-547-31539-3
4. ANS: A PTS: 1 DIF: Level B REF: MALG1110
 NAT: NT.CCSS.MTH.10.9-12.A.SSE.3.c
 TOP: Lesson 7.1 Apply Exponent Properties Involving Products
 KEY: simplify | power rule | exponent MSC: DOK 1 NOT: 978-0-547-31539-3
5. ANS: D PTS: 1 DIF: Level B REF: MALG1134
 NAT: NT.CCSS.MTH.10.9-12.A.SSE.3.c
 TOP: Lesson 7.3 Define and Use Zero and Negative Exponents
 KEY: negative | exponent MSC: DOK 1 NOT: 978-0-547-31539-3
6. ANS: B PTS: 1 DIF: Level B REF: MALG1141
 NAT: NT.CCSS.MTH.10.9-12.A.SSE.3.c
 TOP: Lesson 7.3 Define and Use Zero and Negative Exponents
 KEY: exponent | divide | multiply | negative | integer | simplify
 MSC: DOK 1 NOT: 978-0-547-31539-3
7. ANS: A PTS: 1 DIF: Level B REF: MAL20566
 NAT: NT.CCSS.MTH.10.9-12.A.SSE.3.a
 TOP: Lesson 1.3 Solve $x^2 + bx + c = 0$ by Factoring KEY: factor | quadratic | trinomial
 MSC: DOK 1 NOT: 978-0-547-31541-6
8. ANS: A PTS: 1 DIF: Level B REF: MAL20567
 NAT: NT.CCSS.MTH.10.9-12.A.SSE.3.a
 TOP: Lesson 1.3 Solve $x^2 + bx + c = 0$ by Factoring KEY: factor | quadratic | trinomial
 MSC: DOK 2 NOT: 978-0-547-31541-6
9. ANS: D PTS: 1 DIF: Level B REF: MAL20570
 NAT: NT.CCSS.MTH.10.9-12.A.REI.4.b
 TOP: Lesson 1.3 Solve $x^2 + bx + c = 0$ by Factoring KEY: solve | equation | quadratic | factor
 MSC: DOK 2 NOT: 978-0-547-31541-6
10. ANS: C PTS: 1 DIF: Level B REF: MAL20572
 NAT: NT.CCSS.MTH.10.9-12.A.REI.4.b
 TOP: Lesson 1.3 Solve $x^2 + bx + c = 0$ by Factoring KEY: equation | factoring | solve
 MSC: DOK 2 NOT: 978-0-547-31541-6

11. ANS: A PTS: 1 DIF: Level B REF: MAL20586
 NAT: NT.CCSS.MTH.10.9-12.A.REI.4.b
 TOP: Lesson 1.4 Solve $ax^2 + bx + c = 0$ by Factoring
 KEY: trinomial | factor | difference of two squares MSC: DOK 1
 NOT: 978-0-547-31541-6
12. ANS: D PTS: 1 DIF: Level B REF: MAL20598
 NAT: NT.CCSS.MTH.10.9-12.A.REI.4.b
 TOP: Lesson 1.4 Solve $ax^2 + bx + c = 0$ by Factoring KEY: factor | quadratic | solve
 MSC: DOK 2 NOT: 978-0-547-31541-6
13. ANS: A PTS: 1 DIF: Level B REF: MAL20587
 NAT: NT.CCSS.MTH.10.9-12.A.REI.4.b
 TOP: Lesson 1.4 Solve $ax^2 + bx + c = 0$ by Factoring KEY: factor | solve | quadratic
 MSC: DOK 2 NOT: 978-0-547-31541-6
14. ANS: C PTS: 1 DIF: Level B REF: MAL20607
 NAT: NT.CCSS.MTH.10.9-12.A.REI.4.b
 TOP: Lesson 1.5 Solve Quadratic Equations by Finding Square Roots
 KEY: equation | quadratic | square root MSC: DOK 2 NOT: 978-0-547-31541-6
15. ANS: D PTS: 1 DIF: Level A REF: MAL20605
 NAT: NT.CCSS.MTH.10.9-12.A.REI.4.b
 TOP: Lesson 1.5 Solve Quadratic Equations by Finding Square Roots
 KEY: solve | square | square root | variable | divide MSC: DOK 2
 NOT: 978-0-547-31541-6
16. ANS: C PTS: 1 DIF: Level B REF: MAL20616
 NAT: NT.CCSS.MTH.10.9-12.A.REI.4.b
 TOP: Lesson 1.5 Solve Quadratic Equations by Finding Square Roots
 KEY: solve | quadratic MSC: DOK 2 NOT: 978-0-547-31541-6
17. ANS: B PTS: 1 DIF: Level B REF: MAL20684
 NAT: NT.CCSS.MTH.10.9-12.A.REI.4.b
 TOP: Lesson 1.8 Use the Quadratic Formula and the Discriminant
 KEY: solve | quadratic | quadratic formula MSC: DOK 2
 NOT: 978-0-547-31541-6
18. ANS: C PTS: 1 DIF: Level B REF: MAL20690
 NAT: NT.CCSS.MTH.10.9-12.N.CN.7 | NT.CCSS.MTH.10.9-12.A.REI.4.b
 LOC: NCTM.PSSM.00.MTH.9-12.NOP.1.b
 TOP: Lesson 1.8 Use the Quadratic Formula and the Discriminant
 KEY: equation | complex | quadratic | function | imaginary | root
 MSC: DOK 2 NOT: 978-0-547-31541-6
19. ANS:
 D
- PTS: 1 DIF: Level B REF: MAL20697 LOC: NCTM.PSSM.00.MTH.9-12.ALG.1.c
 TOP: Lesson 1.8 Use the Quadratic Formula and the Discriminant
 KEY: quadratic | discriminant | solutions MSC: DOK 2 NOT: 978-0-547-31541-6

20. ANS:
C

PTS: 1 DIF: Level B REF: MAL20696 LOC: NCTM.PSSM.00.MTH.9-12.ALG.1.c

TOP: Lesson 1.8 Use the Quadratic Formula and the Discriminant

KEY: discriminant | solutions

MSC: DOK 2

NOT: 978-0-547-31541-6

21. ANS: D

Step 1 Determine whether the function has a minimum or maximum value.

Because a is positive, the graph opens upward and has a minimum value.

Step 2 Find the x -value of the vertex.

$$x = -\frac{b}{2a} = -\frac{-2}{2(1)} = 1$$

Step 3 Find the y -value of the vertex.

$$f(1) = (1)^2 - 2(1) - 6 = -7$$

The minimum value is -7 . The domain is {all real numbers}. The range is $\{y \mid y \geq -7\}$.

	Feedback
A	The maximum or minimum value is the y -value of the vertex.
B	Check the domain and range.
C	If a parabola opens upward, then there is a minimum value. If a parabola opens downward, then there is a maximum value.
D	Correct!

PTS: 1 DIF: Average REF: 156940be-4683-11df-9c7d-001185f0d2ea

OBJ: 2-2.3 Finding Minimum or Maximum Values

NAT: NT.CCSS.MTH.10.9-12.F.IF.7

LOC: MTH.C.10.07.06.015 | MTH.C.10.07.06.017

TOP: 2-2 Properties of Quadratic Functions in Standard Form

KEY: maximum | minimum

MSC: DOK 3

22. ANS: C

$$\frac{3x^7}{2x^6y} \div \frac{9}{2y^4}$$

Rewrite as multiplication by the reciprocal.

$$= \frac{3x^7}{2x^6y} \cdot \frac{2y^4}{9}$$

Simplify by canceling common factors.

$$= \frac{xy^3}{3}$$

	Feedback
A	Multiply the first fraction by the reciprocal of the second fraction.
B	To divide by a fraction, you multiply by its reciprocal.
C	Correct!
D	To divide by a fraction, you multiply by its reciprocal.

PTS: 1 DIF: Basic REF: 16a195d2-4683-11df-9c7d-001185f0d2ea
 OBJ: 5-2.4 Dividing Rational Expressions NAT: NT.CCSS.MTH.10.9-12.A.APR.7
 STA: SC.SCCS.MTH.07.9-12.IA-4.8 LOC: MTH.C.10.05.09.014
 TOP: 5-2 Multiplying and Dividing Rational Expressions MSC: DOK 2

23. ANS: B

$$A = lw$$

Area of a rectangle equals length times width.

$$(x^2 + 14x + 40) = (x + 10)w$$

Substitute the area and length expressions given.

$$\frac{(x + 10)(x + 4)}{(x + 10)} = w$$

Factor and solve for w .

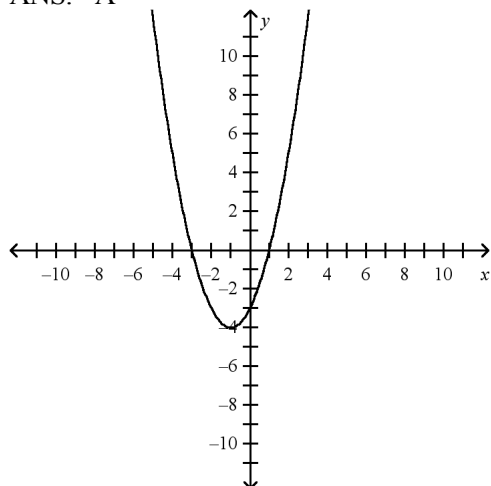
$$(x + 4) = w$$

Simplify.

	Feedback
A	In a rectangle, length times width equals area.
B	Correct!
C	Multiply the expressions for length and width to be sure they create the polynomial expression for area.
D	Factor the polynomial to find the possible length and width.

PTS: 1 DIF: Advanced REF: 16a6337a-4683-11df-9c7d-001185f0d2ea
 NAT: NT.CCSS.MTH.10.9-12.A.APR.6 STA: SC.SCCS.MTH.07.9-12.IA-4.8
 LOC: MTH.C.10.05.09.014 TOP: 5-2 Multiplying and Dividing Rational Expressions
 MSC: DOK 2

24. ANS: A



If a function has one zero, use the x -coordinate of the vertex to find the axis of symmetry.
 If a function has two zeros, use the average of the two zeros to find the axis of symmetry.

	Feedback
A	Correct!
B	The axis of symmetry of a parabola is a vertical line. All the points it contains have the same x -value, so the variable in the equation should be x and not y .
C	The axis of symmetry of a parabola is a vertical line. All the points it contains have the same x -value, so the variable in the equation should be x and not y .
D	Look at the graph. Does the line you found divide the parabola into two symmetrical halves?

PTS: 1 DIF: Average REF: 1566b752-4683-11df-9c7d-001185f0d2ea
 OBJ: 2-2.1 Identifying the Axis of Symmetry NAT: NT.CCSS.MTH.10.9-12.F.IF.7
 LOC: MTH.C.10.07.06.01.007 TOP: 2-2 Properties of Quadratic Functions in Standard Form
 MSC: DOK 3

25. ANS: A PTS: 1 DIF: Level B REF: MAL20772
 NAT: NT.CCSS.MTH.10.9-12.A.APR.1
 TOP: Lesson 2.3 Add, Subtract, and Multiply Polynomials KEY: polynomials | subtract
 MSC: DOK 1 NOT: 978-0-547-31541-6
26. ANS: B PTS: 1 DIF: Level B REF: MAL20768
 NAT: NT.CCSS.MTH.10.9-12.A.APR.1
 TOP: Lesson 2.3 Add, Subtract, and Multiply Polynomials KEY: polynomials | add
 MSC: DOK 1 NOT: 978-0-547-31541-6
27. ANS: C PTS: 1 DIF: Level A REF: MAL20776
 NAT: NT.CCSS.MTH.10.9-12.A.APR.1
 TOP: Lesson 2.3 Add, Subtract, and Multiply Polynomials
 KEY: trinomial | binomial | polynomial | multiply MSC: DOK 1
 NOT: 978-0-547-31541-6

28. ANS: D PTS: 1 DIF: Level A REF: MAL20779
 NAT: NT.CCSS.MTH.10.9-12.A.APR.1
 TOP: Lesson 2.3 Add, Subtract, and Multiply Polynomials KEY: multiply | polynomials
 MSC: DOK 2 NOT: 978-0-547-31541-6
29. ANS: C PTS: 1 DIF: Level A REF: MAL20808
 TOP: Lesson 2.5 Apply the Remainder and Factor Theorems
 KEY: polynomial | divide MSC: DOK 2 NOT: 978-0-547-31541-6
30. ANS: D PTS: 1 DIF: Level A REF: MAL20806
 TOP: Lesson 2.5 Apply the Remainder and Factor Theorems
 KEY: polynomial | divide MSC: DOK 2 NOT: 978-0-547-31541-6
31. ANS: A PTS: 1 DIF: Level A REF: MAL20810
 TOP: Lesson 2.5 Apply the Remainder and Factor Theorems
 KEY: polynomial | divide MSC: DOK 2 NOT: 978-0-547-31541-6
32. ANS: C PTS: 1 DIF: Level A REF: MAL20783
 TOP: Lesson 2.4 Factor and Solve Polynomial Equations KEY: polynomial | factor
 MSC: DOK 2 NOT: 978-0-547-31541-6
33. ANS: D PTS: 1 DIF: Level A REF: MAL20797
 TOP: Lesson 2.4 Factor and Solve Polynomial Equations KEY: solve | cubic | factor | zero product
 MSC: DOK 2 NOT: 978-0-547-31541-6
34. ANS: B
 $-5x^5 - 30x^4 - 40x^3 = 0$ Factor out the GCF, $-5x^3$.
 $-5x^3(x^2 + 6x + 8) = 0$
 $-5x^3(x+4)(x+2) = 0$ Factor the quadratic.
 $-5x^3 = 0, x+4 = 0, x+2 = 0$ Set each factor equal to 0.
 $x = 0, x = -4, x = -2$ Solve for x .

	Feedback
A	Set each factored expression equal to zero and solve.
B	Factor out the GCF first.
C	Set the GCF equal to zero.
D	Correct!

- PTS: 1 DIF: Average REF: 15f8273e-4683-11df-9c7d-001185f0d2ea
 OBJ: 3-5.1 Using Factoring to Solve Polynomial Equations
 NAT: NT.CCSS.MTH.10.9-12.A.APR.2 | NT.CCSS.MTH.10.9-12.A.APR.3
 LOC: MTH.C.10.06.05.01.003 TOP: 3-5 Finding Real Roots of Polynomial Equations
 MSC: DOK 3
35. ANS: A PTS: 1 DIF: Level A REF: MAL21214
 NAT: NT.CCSS.MTH.10.9-12.A.APR.7
 TOP: Lesson 5.4 Multiply and Divide Rational Expressions KEY: rational expressions | multiply
 MSC: DOK 2 NOT: 978-0-547-31541-6
36. ANS: D PTS: 1 DIF: Level B REF: MAL21217
 NAT: NT.CCSS.MTH.10.9-12.A.APR.7
 TOP: Lesson 5.4 Multiply and Divide Rational Expressions KEY: divide | rational expressions
 MSC: DOK 2 NOT: 978-0-547-31541-6

37. ANS: B PTS: 1 DIF: Level B REF: MALG0735
 NAT: NT.CCSS.MTH.10.9-12.F.LE.2 | NT.CCSS.MTH.10.9-12.F.BF.1.a
 LOC: NCTM.PSSM.00.MTH.9-12.PRS.3 | NCTM.PSSM.00.MTH.9-12.REP.2
 TOP: Lesson 4.1 Write Linear Equations in Slope-Intercept Form
 KEY: equation | word | model | linear | evaluate MSC: DOK 2
 NOT: 978-0-547-31539-3
38. ANS: B PTS: 1 DIF: Level B REF: MALG0808
 NAT: NT.CCSS.MTH.10.9-12.G.GPE.5
 TOP: Lesson 4.5 Write Equations of Parallel and Perpendicular Lines
 KEY: line | point | equation | slope | parallel MSC: DOK 2
 NOT: 978-0-547-31539-3
39. ANS: A PTS: 1 DIF: Level B REF: MAL20780
 NAT: NT.CCSS.MTH.10.9-12.A.APR.1
 TOP: Lesson 2.3 Add, Subtract, and Multiply Polynomials KEY: word | polynomial | add
 MSC: DOK 2 NOT: 978-0-547-31541-6
40. ANS: C PTS: 1 DIF: Level B REF: MALG0759
 NAT: NT.CCSS.MTH.10.9-12.A.CED.2
 TOP: Lesson 4.2 Use Linear Equations in Slope-Intercept Form
 KEY: equation | points | line | slope-intercept MSC: DOK 1
 NOT: 978-0-547-31539-3
41. ANS: D PTS: 1 DIF: Level B REF: MAL20873
 NAT: NT.CCSS.MTH.10.9-12.N.RN.2 TOP: Lesson 3.1 Evaluate nth Roots and Use Rational Exponents
 KEY: rational exponent MSC: DOK 1 NOT: 978-0-547-31541-6
42. ANS: D PTS: 1 DIF: Level A REF: MAL20988
 NAT: NT.CCSS.MTH.10.9-12.A.REI.2 TOP: Lesson 3.6 Solve Radical Equations
 KEY: radical equation MSC: DOK 2 NOT: 978-0-547-31541-6
43. ANS: D

$$\left(2^3\right)^{x+2} = \left(2^2\right)^x \quad \text{Rewrite each side as powers of the same base.}$$

$$2^{3(x+2)} = 2^{2x} \quad \text{To raise a power to a power, multiply the exponents.}$$

$$3(x+2) = 2x \quad \text{The bases are the same, so the exponents must be equal.}$$

$$x = -6$$

The solution is $x = -6$.

	Feedback
A	Rewrite each side as powers of the same base and then set the exponents equal.
B	Rewrite each side as powers of the same base and then set the exponents equal.
C	Rewrite each side as powers of the same base and then set the exponents equal.
D	Correct!

PTS: 1 DIF: Average REF: 1657acae-4683-11df-9c7d-001185f0d2ea
 OBJ: 4-5.1 Solving Exponential Equations NAT: NT.CCSS.MTH.10.9-12.F.BF.5
 LOC: MTH.C.10.06.08.003 TOP: 4-5 Exponential and Logarithmic Equations and Inequalities
 MSC: DOK 3

44. ANS: B PTS: 1 DIF: Level B REF: MAL21117
 NAT: NT.CCSS.MTH.10.9-12.F.BF.5 TOP: Lesson 4.6 Solve Exponential and Logarithmic Equations
 KEY: solve | equation | exponential MSC: DOK 2 NOT: 978-0-547-31541-6

45. ANS: A

Find $P(-4)$ by synthetic substitution.

$$\begin{array}{r|rrrr}
 -4 & 3 & 8 & -15 & 2 \\
 & & -12 & 16 & -4 \\
 \hline
 & 3 & -4 & 1 & -2
 \end{array}$$

Since $P(-4) \neq 0$, $x + 4$ is not a factor of the polynomial $P(x) = 3x^3 + 8x^2 - 15x + 2$.

	Feedback
A	Correct!
B	$(x - r)$ is a factor of $P(x)$ if and only if $P(r) = 0$. Find $P(r)$ by synthetic substitution.
C	$(x - r)$ is a factor of $P(x)$ if and only if $P(r) = 0$. Find $P(r)$ by synthetic substitution.

PTS: 1 DIF: Average REF: 15f1002a-4683-11df-9c7d-001185f0d2ea

OBJ: 3-4.1 Determining Whether a Linear Binomial is a Factor

NAT: NT.CCSS.MTH.10.9-12.A.SSE.2 LOC: MTH.C.10.07.07.02.002

TOP: 3-4 Factoring Polynomials MSC: DOK 3

46. ANS: D

PTS: 1

DIF: Level A

REF: MAL21265

NAT: NT.CCSS.MTH.10.9-12.A.REI.2 TOP: Lesson 5.6 Solve Rational Equations

KEY: rational equations | solve | extraneous solutions

MSC: DOK 2

NOT: 978-0-547-31541-6

47. ANS: C

PTS: 1

DIF: Level A

REF: MAL21261

NAT: NT.CCSS.MTH.10.9-12.A.REI.2 TOP: Lesson 5.6 Solve Rational Equations

KEY: rational equations | solve | extraneous solutions

MSC: DOK 2

NOT: 978-0-547-31541-6

48. ANS: A

PTS: 1

DIF: Level A

REF: MAL21249

NAT: NT.CCSS.MTH.10.9-12.A.REI.2 TOP: Lesson 5.6 Solve Rational Equations

KEY: rational equations | solve | extraneous solutions

MSC: DOK 2

NOT: 978-0-547-31541-6

49. ANS: A

$$\begin{aligned}
 (f-g)(x) &= f(x) - g(x) \\
 &= (2x^2 + 8x - 4) - (-5x + 6) \\
 &= 2x^2 + 13x - 10
 \end{aligned}$$

Substitute function rules.

Distribute the negative and combine like terms.

	Feedback
A	Correct!
B	Make sure to combine like terms.
C	Be sure to distribute the negative sign.
D	Make sure to combine like terms.

PTS: 1

DIF: Basic

REF: 171d6972-4683-11df-9c7d-001185f0d2ea

OBJ: 6-5.1 Adding and Subtracting Functions

NAT: NT.CCSS.MTH.10.9-12.F.BF.1.b

STA: SC.SCCS.MTH.07.9-12.IA-2.5

LOC: MTH.C.10.07.15.02.001 | MTH.C.10.07.15.03.001

TOP: 6-5 Operations with Functions

MSC: DOK 2

50. ANS: C

$$\begin{aligned}
 g(f(3)) &= g(3^3) & f(x) &= x^3 \\
 &= g(27) & & \text{Simplify.} \\
 &= 4(27) + 3 & g(x) &= 4x + 3 \\
 &= 111 & & \text{Simplify.}
 \end{aligned}$$

So, $g(f(3)) = 111$.

	Feedback
A	Complete the calculation for $g(x)$.
B	This is the result of reversing the order of the functions. Find $f(x)$ first, then use that result to find $g(x)$.
C	Correct!
D	This is the result of multiplying instead of composition. Find $f(x)$ first, then use that result to find $g(x)$.

PTS: 1

DIF: Average

REF: 171ff2de-4683-11df-9c7d-001185f0d2ea

OBJ: 6-5.3 Evaluating Composite Functions

NAT: NT.CCSS.MTH.10.9-12.F.BF.1.c

LOC: MTH.C.10.07.15.05.006

TOP: 6-5 Operations with Functions

MSC: DOK 1

51. ANS: A

The standard form is written with the terms in order from highest to lowest degree.
 In standard form, the degree of the first term is the degree of the polynomial.
 The polynomial has 6 terms. It is a quintic polynomial.

	Feedback
A	Correct!
B	The standard form is written with the terms in order from highest to lowest degree.
C	Find the correct coefficient of the x -cubed term.
D	The standard form is written with the terms in order from highest to lowest degree.

PTS: 1 DIF: Average REF: 15d92892-4683-11df-9c7d-001185f0d2ea

OBJ: 3-1.2 Classifying Polynomials

LOC: MTH.C.10.05.08.004 | MTH.C.10.05.08.006 | MTH.C.10.05.08.007

TOP: 3-1 Polynomials

MSC: DOK 2

52. ANS: B

Use the Distributive Property to multiply the monomial by each term inside the parentheses. Group terms to get like bases together, and then multiply.

	Feedback
A	Don't forget to multiply the coefficients for each term.
B	Correct!
C	When multiplying like bases, add the exponents.
D	Multiply the coefficients for each term; don't add.

PTS: 1 DIF: Basic REF: 15e076b6-4683-11df-9c7d-001185f0d2ea

OBJ: 3-2.1 Multiplying a Monomial and a Polynomial NAT: NT.CCSS.MTH.10.9-12.A.APR.1

STA: SC.SCCS.MTH.07.9-12.IA-4.1 LOC: MTH.C.10.05.08.03.02.002

TOP: 3-2 Multiplying Polynomials

MSC: DOK 3

53. ANS: A

Step 1 Graph $g(x)$ on a calculator.

The graph appears to have one local maximum and one local minimum.

Step 2 Use the maximum feature of your graphing calculator to estimate the local maximum.

The local maximum is about 31.627417.

Step 3 Use the minimum feature of your graphing calculator to estimate the local minimum.The local minimum is about -13.627417 .

	Feedback
A	Correct!
B	The constant is a positive number.
C	You forgot to add the constant of the function to the calculator.
D	You reversed the values of the maximum and minimum.

PTS: 1 DIF: Average REF: 160b3a1e-4683-11df-9c7d-001185f0d2ea

OBJ: 3-7.4 Determine Maxima and Minima with a Calculator

NAT: NT.CCSS.MTH.10.9-12.A.APR.3 | NT.CCSS.MTH.10.9-12.F.IF.7.c

STA: SC.SCCS.MTH.07.9-12.IA-4.2 LOC: MTH.C.10.07.07.03.014 | MTH.C.10.07.07.03.015

TOP: 3-7 Investigating Graphs of Polynomial Functions MSC: DOK 3

54. ANS: A

$$g(x) = 6f(x + 5)$$

$$g(x) = 6(2(x + 5)^3 + 4)$$

$$g(x) = 12(x + 5)^3 + 24$$

	Feedback
A	Correct!
B	The vertical stretch factor will effect the y-intercept.
C	The left shift value is added to the x value before it is cubed.
D	A shift to the left involves adding, not subtracting.

PTS: 1 DIF: Average REF: 16126132-4683-11df-9c7d-001185f0d2ea

OBJ: 3-8.4 Combining Transformations

NAT: NT.CCSS.MTH.10.9-12.A.CED.2 | NT.CCSS.MTH.10.9-12.F.BF.3

TOP: 3-8 Transforming Polynomial Functions MSC: DOK 3

55. ANS: 2

PTS: 1 DIF: Advanced REF: 1620af5a-4683-11df-9c7d-001185f0d2ea

NAT: NT.CCSS.MTH.10.9-12.F.IF.7.c LOC: MTH.C.10.07.07.03.013

TOP: 3-7 Investigating Graphs of Polynomial Functions MSC: DOK 3