

Geometry Summer Math Assignment - SHOW ALL WORK

Answer Section

1. ANS: B 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
2. ANS:
 \$285 per month
- PTS: 1 DIF: Level B REF: MALG0663 LOC: NCTM.PSSM.00.MTH.9-12.ALG.4.a
 TOP: Lesson 3.4 Find Slope and Rate of Change KEY: average | word
 MSC: DOK 2 NOT: 978-0-547-31539-3
3. ANS: D 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
4. ANS: D PTS: 1 DIF: Level B REF: MALG0736
 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: linear | equation | word | slope | model | intercept MSC: DOK 2
 NOT: 978-0-547-31539-3
5. ANS: A PTS: 1 DIF: Level A REF: MALG0747
 NAT: NT.CCSS.MTH.10.9-12.A.CED.2
 TOP: Lesson 4.2 Use Linear Equations in Slope-Intercept Form
 KEY: equation | slope | slope-intercept | linear | point MSC: DOK 1
 NOT: 978-0-547-31539-3
6. ANS: D 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
7. ANS: C
 C
- PTS: 1 DIF: Level A REF: MALG0397 NAT: NT.CCSS.MTH.10.9-12.A.REI.3
 TOP: Lesson 2.4 Solve Multi-Step Equations KEY: multi-step equations | solve
 MSC: DOK 1 NOT: 978-0-547-31539-3
8. ANS: C PTS: 1 DIF: Level B REF: MALG0681
 LOC: NCTM.PSSM.00.MTH.9-12.ALG.1.c
 TOP: Lesson 3.5 Graph Using Slope-Intercept Form KEY: slope | y-intercept | line
 MSC: DOK 1 NOT: 978-0-547-31539-3

9. ANS: D

$$r = \frac{V}{I} \quad \text{Locate } V \text{ in the equation.}$$

$$(I)(r) = \left(\frac{V}{I}\right)(I) \quad \text{Since } V \text{ is divided by } I, \text{ multiply both sides by } I \text{ to undo the division.}$$

$$Ir = V$$

	Feedback
A	Multiply both sides by I to isolate r .
B	Multiply both sides by I to isolate r .
C	Multiply both sides by I to isolate r .
D	Correct!

PTS: 1

DIF: Basic

REF: 0fac6c4e-4683-11df-9c7d-001185f0d2ea

OBJ: 1-6.2 Solving Formulas for a Variable

NAT: NT.CCSS.MTH.10.9-12.A.CED.4

STA: SC.SCCS.MTH.07.9-12.EA-3.7

LOC: MTH.C.10.07.18.002

TOP: 1-6 Solving for a Variable

KEY: literal equation | solving | variables

MSC: DOK 2

10. ANS: A

$$4x - z = y$$

Add z to both sides.

$$\begin{array}{r} +z \\ +z \end{array}$$

Divide both sides by 4.

$$\frac{4x}{4} = \frac{y+z}{4}$$

$$x = \frac{y+z}{4}$$

	Feedback
A	Correct!
B	To undo subtraction, add to both sides.
C	To undo multiplication, divide.
D	Both terms need to be divided by the coefficient of x .

PTS: 1

DIF: Basic

REF: 0fac935e-4683-11df-9c7d-001185f0d2ea

OBJ: 1-6.3 Solving Literal Equations for a Variable

TOP: 1-6 Solving for a Variable

KEY: literal equation | solving for a variable

MSC: DOK 2

11. ANS: A

PTS: 1

DIF: Level B

REF: MALG0957

TOP: Lesson 5.6 Solve Absolute Value Inequalities

KEY: absolute value | inequality

MSC: DOK 1

NOT: 978-0-547-31539-3

12. ANS: A

PTS: 1

DIF: Level B

REF: MALG0889

NAT: NT.CCSS.MTH.10.9-12.A.REI.3

TOP: Lesson 5.3 Solve Multi-Step Inequalities

KEY: graph | inequality

MSC: DOK 1

NOT: 978-0-547-31539-3

13. ANS: C

PTS: 1

DIF: Level B

REF: MALG0951

TOP: Lesson 5.6 Solve Absolute Value Inequalities

KEY: absolute value | inequality | solve

MSC: DOK 1

NOT: 978-0-547-31539-3

14. ANS: B PTS: 1 DIF: Level B REF: MALG1012
 NAT: NT.CCSS.MTH.10.9-12.A.REI.6 LOC: NCTM.PSSM.00.MTH.9-12.ALG.2.b
 TOP: Lesson 6.2 Solve Linear Systems by Substitution
 KEY: substitution | two variables | linear | solve system MSC: DOK 1
 NOT: 978-0-547-31539-3
15. ANS: A PTS: 1 DIF: Level B REF: MALG1022
 NAT: NT.CCSS.MTH.10.9-12.A.CED.2 | NT.CCSS.MTH.10.9-12.A.REI.6
 TOP: Lesson 6.2 Solve Linear Systems by Substitution KEY: solve | word | system
 MSC: DOK 2 NOT: 978-0-547-31539-3
16. ANS: A
 To find the x -intercept, let $y = 0$ and solve for x ; to find the y -intercept, let $x = 0$ and solve for y .

Then, plot the intercepts and draw a line connecting them.

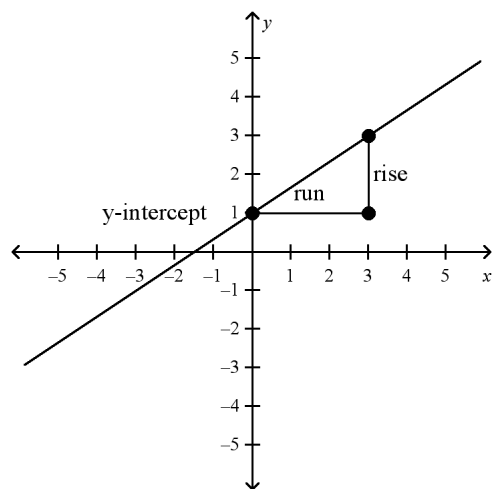
	Feedback
A	Correct!
B	Check that you solved for the y -intercept correctly.
C	To find the x -intercept, replace y with 0 and solve for x . To find the y -intercept, replace x with 0 and solve for y .
D	Check that you solved for the x -intercept correctly.

- PTS: 1 DIF: Average REF: 10b53942-4683-11df-9c7d-001185f0d2ea
 OBJ: 4-2.3 Graphing Linear Equations by Using Intercepts NAT: NT.CCSS.MTH.10.9-12.F.IF.7.a
 LOC: MTH.C.10.07.02.03.008 TOP: 4-2 Using Intercepts
 KEY: linear equation | graphing | x -intercept | y -intercept | intercept
 MSC: DOK 2
17. ANS: C PTS: 1 DIF: Level A REF: MALG1317
 TOP: Lesson 8.5 Factor $x^2 + bx + c$ KEY: trinomial | binomial | factor
 MSC: DOK 1 NOT: 978-0-547-31539-3
18. ANS:
 $(x - 5)(x + 2)$

PTS: 1 DIF: Level A REF: MALG1327 NAT: NT.CCSS.MTH.10.9-12.A.SSE.3.a
 TOP: Lesson 8.6 Factor $ax^2 + bx + c$ KEY: factor | trinomial
 MSC: DOK 1 NOT: 978-0-547-31539-3

19. ANS: B

Plot the y -intercept 1 on the graph at $(0, 1)$. The slope is $\frac{2}{3}$, so from the y -intercept, rise 2 units and run 3 units. Plot another point. Connect the points to graph the line.



	Feedback
A	The y -intercept should lie on the y -axis.
B	Correct!
C	In the form $y = mx + b$, m is the slope and b is the y -intercept.
D	Slope is rise over run.

PTS: 1 DIF: Basic REF: 10d410de-4683-11df-9c7d-001185f0d2ea
 OBJ: 4-6.1 Graphing by Using Slope and y -intercept NAT: NT.CCSS.MTH.10.9-12.A.CED.2
 STA: SC.SCCS.MTH.07.9-12.EA-5.1 | SC.SCCS.MTH.07.9-12.EA-5.2 | SC.SCCS.MTH.07.9-12.EA-5.3 |
 SC.SCCS.MTH.07.9-12.EA-5.4 LOC: MTH.C.10.07.02.01.02.003
 TOP: 4-6 Slope-Intercept Form KEY: slope | intercept | graph
 MSC: DOK 2

20. ANS: B

If you are given the slope and one point, you can find the y -intercept by substituting for m , x , and y in the equation $y = mx + b$. Then, solve for b .

$$-2 = 4(3) + b$$

$$-2 = 12 + b$$

$$-14 = b$$

So, the equation of the line in slope-intercept form is $y = 4x - 14$.

	Feedback
A	Check the sign of b .
B	Correct!
C	Check that you used inverse operations when solving for b .
D	The value of b is not the y -value of the given point. Substitute for m , x , and y into $y = mx + b$, and then solve for b .

PTS: 1 DIF: Average REF: 10d6733a-4683-11df-9c7d-001185f0d2ea

OBJ: 4-6.2 Writing Linear Equations in Slope-Intercept Form

STA: SC.SCCS.MTH.07.9-12.EA-4.6 LOC: MTH.C.10.07.02.02.01.001

TOP: 4-6 Slope-Intercept Form KEY: slope | y -intercept | slope-intercept form

MSC: DOK 2

21. ANS: B

Substitute the point and slope into the point-slope form $y - y_1 = m(x - x_1)$, where m represents the slope and (x_1, y_1) represents a point on the line.

	Feedback
A	Check the signs. Notice that the formula subtracts the coordinates of the given point.
B	Correct!
C	Check the formula. Notice that the slope multiplies the x -coordinates, not the y -coordinates.
D	Use the first coordinate in the ordered pair for x_1 and the second coordinate for y_1 .

PTS: 1 DIF: Average REF: 10db37f2-4683-11df-9c7d-001185f0d2ea

OBJ: 4-7.1 Writing Linear Equations in Point-Slope Form NAT: NT.CCSS.MTH.10.9-12.A.CED.2

STA: SC.SCCS.MTH.07.9-12.EA-4.6 LOC: MTH.C.10.07.02.02.008

TOP: 4-7 Point-Slope Form KEY: linear equation | point-slope form

MSC: DOK 2

22. ANS: A

The expression $26 + n$ models the number of points Juan scored in all.

Evaluate $26 + n$ for $n = 18$.

$$26 + 18 = 44$$

If Juan scored 18 points in the second half of the game, then he scored 44 points in all.

	Feedback
A	Correct!
B	Use a different operation instead of division.
C	Use a different operation.
D	Use a different operation.

PTS: 1

DIF: Average

REF: 0ef4d6a2-4683-11df-9c7d-001185f0d2ea

OBJ: 1-1.4 Application

NAT: NT.CCSS.MTH.10.9-12.A.SSE.1

STA: SC.SCCS.MTH.07.9-12.EA-2.6

LOC: MTH.C.10.05.02.02.013 | MTH.C.10.05.02.02.019

TOP: 1-1 Variables and Expressions

KEY: algebraic expression | word problem | operation

MSC: DOK 3

23. ANS: D

highest score	minus	lowest score	equals	score range
h	$-$	l	$=$	23

$$h - l = 23$$

Write an equation to represent the relationship.

$$h - 33 = 23$$

Substitute 33 for l .

$$h = 56$$

Solve the equation.

	Feedback
A	The range is the difference between the highest and the lowest values, not the average.
B	The sum of the lowest value and the range is the highest value.
C	The range is the difference between the highest and the lowest values, not the sum.
D	Correct!

PTS: 1

DIF: Advanced

REF: 0f8fcffe-4683-11df-9c7d-001185f0d2ea

NAT: NT.CCSS.MTH.10.9-12.A.CED.1 | NT.CCSS.MTH.10.9-12.A.REI.3

STA: SC.SCCS.MTH.07.9-12.EA-4.7

LOC: MTH.C.10.06.01.009 | MTH.C.10.06.02.01.004

TOP: 1-2 Solving Equations by Adding or Subtracting

KEY: equations | solving | addition | subtraction

MSC: DOK 2

24. ANS: A

$$4x = 32$$

$$x = 8$$

Solve the equation.

$$35 - 5x$$

$$35 - 5 \cdot 8 = -5$$

Substitute 8 for x and simplify.

	Feedback
A	Correct!
B	Find the value of x by solving the equation. Then substitute it for x in the given expression and simplify.
C	Find the value of x by solving the equation. Then substitute it for x in the given expression and simplify.
D	Subtract the terms in the right order.

PTS: 1

DIF: Advanced

REF: 0f971e22-4683-11df-9c7d-001185f0d2ea

NAT: NT.CCSS.MTH.10.9-12.A.REI.3

STA: SC.SCCS.MTH.07.9-12.EA-4.7

LOC: MTH.C.10.06.02.01.007

TOP: 1-3 Solving Equations by Multiplying or Dividing

KEY: equations | solving | multiplication | division

MSC: DOK 3

25. ANS: B

After paying \$24.95 for roller skates, the number of visits to the roller rink that Devon can afford is

$$\frac{76.30 - 24.95}{3.95} = 13.$$

	Feedback
A	The roller skates are paid for once; only the visits have to be paid for multiple times.
B	Correct!
C	She pays \$3.95 for each visit, not one dollar.
D	Before you determine the number of visits, subtract the cost of the roller skates.

PTS: 1

DIF: Average

REF: 0f9e1e26-4683-11df-9c7d-001185f0d2ea

OBJ: 1-4.4 Problem-Solving Application

STA: SC.SCCS.MTH.07.9-12.EA-4.7

LOC: MTH.C.10.06.02.01.008

TOP: 1-4 Solving Two-Step and Multi-Step Equations

KEY: multi-step | equations

MSC: DOK 2

26. ANS: D

$$50q - 43 = 52q - 81$$

$$\begin{array}{r} -50q \\ \hline \end{array} \quad \begin{array}{r} -50q \\ \hline \end{array}$$

$$-43 = 2q - 81$$

$$\begin{array}{r} +81 \\ \hline \end{array} \quad \begin{array}{r} +81 \\ \hline \end{array}$$

$$38 = 2q$$

$$\frac{38}{2} = \frac{2q}{2}$$

$$19 = q$$

To collect the variable terms on one side, subtract $50q$ from both sides.

Since 81 is subtracted from $2q$, add 81 to both sides to undo the subtraction.

Since q is multiplied by 2, divide both sides by 2 to undo the multiplication.

	Feedback
A	After adding to undo the subtraction, divide to undo the multiplication.
B	Check your signs.
C	First, collect the variable terms on one side. Then, add to undo the subtraction.
D	Correct!

PTS: 1

DIF: Average

REF: 0fa2e2de-4683-11df-9c7d-001185f0d2ea

OBJ: 1-5.1 Solving Equations with Variables on Both Sides NAT: NT.CCSS.MTH.10.9-12.A.REI.3

STA: SC.SCCS.MTH.07.9-12.EA-4.7 LOC: MTH.C.10.06.02.01.008 | MTH.C.10.06.02.01.009

TOP: 1-5 Solving Equations with Variables on Both Sides KEY: equation | two-step | multi-step

MSC: DOK 2

27. ANS: B

Combine like terms on each side of the equation before collecting variable terms on one side.

If you get an equation that is always true, the original equation is an identity, and it has infinitely many solutions.

If you get a false equation, the original equation is a contradiction, and it has no solutions.

	Feedback
A	First, combine like terms on each side of the equation. Then collect variable terms on one side. Now, if you get an equation that is always true, it means that the original equation has infinitely many solutions. If you get a false equation, the original equation has no solutions.
B	Correct!
C	If you get an equation that is always true, the original equation is an identity, and it has infinitely many solutions. If you get a false equation, the original equation is a contradiction and it has no solutions.
D	If you get an equation that is always true, the original equation is an identity, and it has infinitely many solutions. If you get a false equation, the original equation has no solutions.

PTS: 1 DIF: Average REF: 0fa5453a-4683-11df-9c7d-001185f0d2ea

OBJ: 1-5.3 Infinitely Many Solutions or No Solutions NAT: NT.CCSS.MTH.10.9-12.A.REI.3

STA: SC.SCCS.MTH.07.9-12.EA-4.7 LOC: MTH.C.10.06.02.01.009 | MTH.C.10.09.01.01.02.02.001

TOP: 1-5 Solving Equations with Variables on Both Sides KEY: identity | equation | infinitely many

MSC: DOK 2

28. ANS: B

$$d = rt$$

$$\frac{d}{t} = \frac{rt}{t} \quad \text{Divide both sides by } t.$$

$$\frac{120}{4.7} = r \quad \text{Substitute the known values.}$$

$$25.5 \approx r \quad \text{Simplify. Round to the nearest tenth.}$$

	Feedback
A	Solve the equation $d = r * t$ for r .
B	Correct!
C	Solve the equation $d = r * t$ for r .
D	Solve the equation $d = r * t$ for r .

PTS: 1 DIF: Average REF: 0faa09f2-4683-11df-9c7d-001185f0d2ea

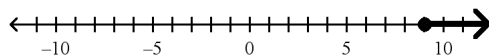
OBJ: 1-6.1 Application NAT: NT.CCSS.MTH.10.9-12.A.CED.4

STA: SC.SCCS.MTH.07.9-12.EA-3.7 LOC: MTH.C.10.07.18.002

TOP: 1-6 Solving for a Variable KEY: solving for a variable | rate | speed | distance

MSC: DOK 2

29. ANS:



PTS: 1 DIF: Level B REF: MALG0892 NAT: NT.CCSS.MTH.10.9-12.A.REI.3
 TOP: Lesson 5.3 Solve Multi-Step Inequalities KEY: inequality | solve | number line | graph
 MSC: DOK 1 NOT: 978-0-547-31539-3

30. ANS:

$$x=3, y=4$$

PTS: 1 DIF: Level B REF: MALG1046 NAT: NT.CCSS.MTH.10.9-12.A.REI.6
 LOC: NCTM.PSSM.00.MTH.9-12.ALG.2.b
 TOP: Lesson 6.4 Solve Linear Systems by Multiplying First KEY: solve | linear system
 MSC: DOK 1 NOT: 978-0-547-31539-3

31. ANS: D

$$2^{-3} = \frac{1}{2^3} \quad \text{The reciprocal of 2 is } \frac{1}{2}.$$

$$= \frac{1}{8} \quad 2^3 = 8.$$

	Feedback
A	A nonzero number raised to a negative exponent is equal to 1 divided by that number raised to the opposite (positive) exponent.
B	A nonzero number raised to a negative exponent is equal to 1 divided by that number raised to the opposite (positive) exponent.
C	Check the sign of your answer. A negative exponent does not affect the sign of the answer.
D	Correct!

PTS: 1 DIF: Average REF: 1163457e-4683-11df-9c7d-001185f0d2ea
 OBJ: 6-1.2 Zero and Negative Exponents NAT: NT.CCSS.MTH.10.8.8.EE.1
 LOC: MTH.C.10.05.03.01.007 | MTH.C.10.05.03.01.015 TOP: 6-1 Integer Exponents
 KEY: negative exponent | evaluate | power | exponent MSC: DOK 2

32. ANS: C

$$\begin{aligned}\frac{9x^0 y^{-8}}{z^{-8}} &= 9 \cdot 1 \cdot y^{-8} \cdot \frac{1}{z^{-8}} \\ &= 9 \cdot 1 \cdot \frac{1}{y^8} \cdot \frac{1}{z^{-8}} \\ &= 9 \cdot 1 \cdot \frac{1}{y^8} \cdot z^8 \\ &= \frac{9z^8}{y^8}\end{aligned}$$

Rewrite $\frac{9x^0 y^{-8}}{z^{-8}}$ without negative or zero

exponents.

Simplify each part of the expression.

$$y^{-8} = \frac{1}{y^8}.$$

$$\frac{1}{z^{-8}} = z^8.$$

	Feedback
A	Any number to the zero power is equal to 1. A negative exponent in the numerator becomes positive in the denominator.
B	Any number to the zero power is equal to 1. A negative exponent in the numerator becomes positive in the denominator.
C	Correct!
D	A negative exponent in the denominator becomes positive in the numerator.

PTS: 1 DIF: Advanced REF: 116a4582-4683-11df-9c7d-001185f0d2ea

OBJ: 6-1.4 Simplify Expressions with Zero and Negative Exponents

LOC: MTH.C.10.05.03.01.011 | MTH.C.10.05.03.01.013 | MTH.C.10.05.03.01.015

TOP: 6-1 Integer Exponents

MSC: DOK 3

33. ANS: D

The standard form is written with the terms in order from highest to lowest degree.

	Feedback
A	The standard form is written with the terms in order from highest to lowest degree.
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	Correct!

PTS: 1 DIF: Basic REF: 119eb96a-4683-11df-9c7d-001185f0d2ea

OBJ: 6-3.3 Writing Polynomials in Standard Form

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

TOP: 6-3 Polynomials

MSC: DOK 2

34. ANS: B

The perimeter of a triangle is the sum of the measures of its sides. In an isosceles triangle, the legs have equal lengths.

$$\text{Perimeter} = \text{leg1} + \text{leg2} + \text{base}$$

$$5x^4 - 2x^3 + x - 3 = (2x^4 + 2x - 1) + (2x^4 + 2x - 1) + \text{base}$$

Substitute the given values.

$$5x^4 - 2x^3 + x - 3 = 4x^4 + 4x - 2 + \text{base}$$

Combine like terms.

$$x^4 - 2x^3 + x - 3 = 4x - 2 + \text{base}$$

Subtract $4x^4$ from both sides.

$$x^4 - 2x^3 - 3x - 3 = -2 + \text{base}$$

Subtract $4x$ from both sides.

$$x^4 - 2x^3 - 3x - 1 = \text{base}$$

Add 2 to both sides.

	Feedback
A	When finding the perimeter of a triangle, add the measures of the three sides.
B	Correct!
C	Check the signs.
D	When finding the perimeter of a triangle, add the measures of the three sides.

PTS: 1 DIF: Advanced REF: 11aaa536-4683-11df-9c7d-001185f0d2ea

NAT: NT.CCSS.MTH.10.9-12.A.APR.1

STA: SC.SCCS.MTH.07.9-12.EA-2.7

LOC: MTH.C.10.05.08.03.001 | MTH.C.10.05.08.03.002

TOP: 6-4 Adding and Subtracting Polynomials

MSC: DOK 3

35. ANS: D

$$\left(\frac{2}{3}\right)(6)(p^4 p^2)(y^3 y^4)(s^5 s^3)$$

Rearrange the terms to group like bases.

$$4p^6 y^7 s^8$$

To multiply powers, add the exponents.

	Feedback
A	To find the coefficient, multiply the fraction by the whole number.
B	To find the coefficient, multiply the fraction by the whole number. To find the product of two powers with the same base, add the exponents.
C	To find the product of two powers with the same base, add the exponents.
D	Correct!

PTS: 1 DIF: Advanced

REF: 11aacc46-4683-11df-9c7d-001185f0d2ea

OBJ: 6-5.1 Multiplying Monomials

NAT: NT.CCSS.MTH.10.9-12.A.APR.1

STA: SC.SCCS.MTH.07.9-12.EA-2.7

LOC: MTH.C.10.05.08.03.02.002

TOP: 6-5 Multiplying Polynomials

MSC: DOK 2

36. ANS: D

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

PTS: 1

DIF: Advanced

REF: 11ad0792-4683-11df-9c7d-001185f0d2ea

OBJ: 6-5.2 Multiplying a Polynomial by a Monomial

NAT: NT.CCSS.MTH.10.9-12.A.APR.1

STA: SC.SCCS.MTH.07.9-12.EA-2.7

LOC: MTH.C.10.05.08.03.02.002

TOP: 6-5 Multiplying Polynomials

MSC: DOK 2

37. ANS: B

$$(n - 5)(n - 1)$$

Use FOIL.

$$n(n - 1) - 5(n - 1)$$

Distribute n and -5 .

$$n(n) + n(-1) - 5(n) - 5(-1)$$

Distribute n and -5 again.

$$n^2 - n - 5n + 5$$

Multiply.

$$n^2 - 6n + 5$$

Combine like-terms.

	Feedback
A	Distribute again, multiply and combine like-terms.
B	Correct!
C	You did not multiply the inner and outer terms.
D	You did not multiply the outer terms.

PTS: 1

DIF: Basic

REF: 11af69ee-4683-11df-9c7d-001185f0d2ea

OBJ: 6-5.3 Multiplying Binomials

NAT: NT.CCSS.MTH.10.9-12.A.APR.1

STA: SC.SCCS.MTH.07.9-12.EA-2.7

LOC: MTH.C.10.05.08.03.01.003

TOP: 6-5 Multiplying Polynomials

MSC: DOK 2

38. ANS: D

Write each equation in slope-intercept form, $y = mx + b$. Plot the y -intercept $(0, b)$, and use the slope (m) to find a second point on the line. Draw the second line in the same way. Find the coordinates of the point where the lines intersect. This is the solution.

	Feedback
A	Check the signs.
B	Check that this point satisfies both equations.
C	Check that this point satisfies both equations.
D	Correct!

PTS: 1 DIF: Average REF: 1122beba-4683-11df-9c7d-001185f0d2ea

OBJ: 5-1.2 Solving a System of Linear Equations by Graphing

NAT: NT.CCSS.MTH.10.9-12.A.REI.6 | NT.CCSS.MTH.10.9-12.A.REI.11

STA: SC.SCCS.MTH.07.9-12.EA-4.9 LOC: MTH.C.10.09.01.01.01.005

TOP: 5-1 Solving Systems by Graphing KEY: coordinate plane | graphing | solving | system of equations

MSC: DOK 2

39. ANS: B

Step 1 $2x - 3y = 11$

$$\frac{3x + 3y = 9}{5x = 20}$$

$$x = 4$$

The y -terms have opposite coefficients.Add the equations to eliminate the y terms.**Step 2** $2(4) - 3y = 11$

$$8 - 3y = 11$$

$$-3y = 3$$

$$y = -1$$

Substitute for x in one of the original equations.Simplify and solve for y .

$$(4, -1)$$

Write the solution as an ordered pair.

	Feedback
A	You switched the x - and y -coordinates.
B	Correct!
C	Add the equations to eliminate the variable, not subtract.
D	This is a solution of the first equation, but it is not a solution of the second equation. Use elimination to find a solution of both equations.

PTS: 1 DIF: Basic REF: 112eaa86-4683-11df-9c7d-001185f0d2ea

OBJ: 5-3.1 Elimination Using Addition NAT: NT.CCSS.MTH.10.9-12.A.REI.6

STA: SC.SCCS.MTH.07.9-12.EA-4.10 LOC: MTH.C.10.09.01.01.01.002

TOP: 5-3 Solving Systems by Elimination

KEY: linear equations | system of equations | solving | elimination

MSC: DOK 2

40. ANS: A

Method 1 Compare slopes and y -intercepts.

$$y = 2x - 1 \rightarrow y = 2x - 1$$

Write both equations in slope-intercept form. The lines

$$2x - y - 1 = 0 \rightarrow y = 2x - 1$$

have the same slope and the same y -intercept.

There are infinitely many solutions. The graph of this system of equations would be the same line.

Method 2 Solve the system algebraically. Use the elimination method.

$$y = 2x - 1$$

Write equations to line up like terms.

$$\rightarrow -2x + y = -1$$

$$2x - y - 1 = 0$$

Add the equations.

$$\rightarrow 2x - y = 1$$

$$0 = 0$$

The equation is an identity.

There are infinitely many solutions.

	Feedback
A	Correct!
B	Compare the slopes and y -intercepts.
C	The graph of the system will be the same line.
D	The graph of the system will be the same line.

PTS: 1

DIF: Average

REF: 113833f6-4683-11df-9c7d-001185f0d2ea

OBJ: 5-4.2 Systems with Infinitely Many Solutions

NAT: NT.CCSS.MTH.10.9-12.A.REI.6

LOC: MTH.C.10.09.01.01.02.02.001 TOP: 5-4 Solving Special Systems

KEY: system of equations | infinitely many solutions | identity

MSC: DOK 2