

Binomials / Model and Evaluate Functions

Long-Term Memory Review – Grade 8

Review 1



1. A _____ is a single term that consists of a number, a variable, or the product of a number and one or more variables raised to whole number powers.

A. monomial B. binomial C. trinomial D. polynomial

2. The statement “4 is c less than twice a number d ” is equivalent to which equation?

A. $2d - c = 4$ B. $2d + c = 4$ C. $c - 2d = 4$ D. $c + 2d = 4$

3. What is the sum of $(4s + 3)$ and $(2s + 1)$?

4. The table shows the price of admission to a drive-in theatre.

# of People	Admission Price
1	\$6.50
2	\$11.50
3	\$16.50
4	\$21.50
5	?

- a. Based on the table, what is the admission price for five people?

- b. Write an algebraic equation for the admission price, P . Use “ x ” to represent the number of people.

$$P =$$

5. What is the sum of $(3s + 6)$ and $(2s + 1)$?

A. $5s + 7$ B. $5s^2 + 7$ C. $6s^2 + 15s + 6$ D. $12s$

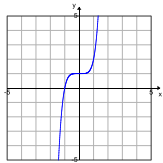
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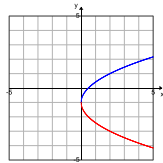
Review 2



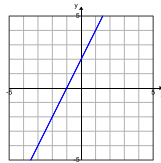
- How many terms does a binomial have?
- Which statement correctly describes the relationship between a and b in the equation $b + 2 = 2a$?
A. b is half of a B. a is half of b C. twice a is 2 more than b D. twice b is 2 more than a
- Which of the following graphs represents a linear function?



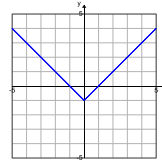
A.



B.



C.



D.

- What is the difference between $(3y - 4)$ and $(y + 7)$?
A. $2y - 11$ B. $2y + 3$ C. $4y - 11$ D. $4y + 3$
- What is the missing term in the function?

x	2	4	6	8
y	5	8	?	14

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Review 3



- 1 Give an example of a binomial.
2. The equation below can be used to find c , the cost in dollars of riding in a cab, for m miles.

$$c = 3m + 2$$

At this rate, what is the cost of riding in a cab for 12 miles?

- A. \$17.00 B. \$34.00 C. \$38.00 D. \$42.00
3. What is the difference between $(5x - 4)$ and $(x + 6)$?
A. $6x + 2$ B. $6x - 10$ C. $4x + 2$ D. $4x - 10$
 4. The table below contains a list of ordered pairs?

x	-2	-1	0	1	2
y	7	4	1	-2	-5

Which equation represents the relationship between x and y ?

- A. $y = -3x - 1$ B. $y = -3x + 1$ C. $y = 3x - 1$ D. $y = 3x + 1$
5. What is the sum of $(-2y^2 + 2)$ and $(3y^2 - 1)$?
A. $y^2 + 1$ B. $2y^2$ C. $6y^4 + 8y^2 - 2$ D. $y^4 + 1$

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Review 4



1. Which are examples of binomials?

A. $2x^2$

B. $5x^3 + 4x^2$

C. $9x$

D. $3x + 6x$

2. The equation below represents the cost, c of buying x computers for \$650 each and y printers for \$300 each.

$$c = 650x + 300y$$

What is the cost of buying 3 computers and 2 printers?

A. \$2,250

B. \$2,550

C. \$4,500

D. \$4,750

3. What is the difference between $(4x - 4)$ and $(x + 5)$

A. $3x - 9$

B. $3x + 1$

C. $5x - 9$

D. $5x + 1$

4. Which equation corresponds to the values in the table below?

x	0	1	2	3
y	-2	-5	-8	-11

A. $y = -3x - 2$

B. $y = -2x - 3$

C. $y = x - 3$

D. $y = 3x - 2$

5. What binomial must be added to $(3r + 4)$ so that the sum of the two polynomials is $(5r - 2)$?

A. $2r - 6$

B. $2r + 2$

C. $8r - 6$

D. $8r + 2$

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Quiz



1. The sum of two monomials with non-like terms creates a(n) _____ .

2. What is the difference between $(3n^3 - 6)$ and $(4n^3 - 13)$?

A. $7n^3 - 19$

B. $7n^3 + 7$

C. $-n^3 + 7$

D. $-n^3 - 19$

3. Which of the following is the equation of the relation below?

x	-3	-2	-1	0	1	2	3
y	-6	-4	-2	0	2	4	6

A. $y = -2x$

B. $y = -\frac{1}{2}x$

C. $y = \frac{1}{2}x$

D. $y = 2x$

4. Which relation represents a linear function?

A.

x	y
-2	7
-1	4
0	-2
1	-5

B.

x	y
-2	-2
-1	-2
0	0
1	1

C.

x	y
-2	4
-1	1
0	0
1	1

D.

x	y
-2	-5
-1	-2
0	1
1	4



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Answers

Review 1- Answers

1. A) monomial 2. A) $2d - c = 4$ 3. $6s + 4$ 4. a) \$26.50 b) $P = 5x + 1.50$
5. A) $5s + 7$

Review 2- Answers

1. 2 2. C) twice a number a is 2 more than b 3. C 4. A) $2y - 11$ 5. 11

Review 3- Answers

1. answers may vary 2. C) \$38.00 3. D) $4x - 10$ 4. B) $y = -3x + 1$ 5. A) $y^2 + 1$

Review 4- Answers

1. B) $5x^3 + 4x^2$ and D) $3x + 6x$ 2. B) \$2,550 3. A) $3x - 9$ 4. A) $y = -3x - 2$
5. A) $2r - 6$

Quiz- Answers

1. binomial 2. C) $-n^3 + 7$ 3. D) $y = 2x$ 4. B)

x	y
-2	-5
-1	-2
0	1
1	4