Quiz

College Algebra

Name:

Choose the correct response. No work necessary.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

True or False

1. $-1 \in \mathbb{N}$

2. $1000000 \in \mathbb{N}$

3. $2^{-1} = 0.5$

4. $1.0 \in \mathbb{Q}$

5. $2^a = 5$ for $a \in \mathbb{Z}$

Select the correct response.

6. Which is demonstrated in $3 * (x \div \pi) = (x \div \pi) * 3$?
   a. associative property of multiplication
   b. commutative property of division
   c. associative property of division
   d. commutative property of multiplication
   e. distribution

7. If $a \neq 0$, what does $4a^4 * a^{-3}$ equal?
   a. $2a$
   b. $2a$
   c. $4a^{-12}$
   d. $4a^7$
   e. $4a$

8. Why does $(x * 101) * 39$ equal $x * (101 * 39)$?
   a. commutative property of addition
   b. associative property of multiplication
   c. commutative property of multiplication
   d. distribution

9. Does $(10000.239 + 5593) * 39 = 10000.239 + 5593 * 39$?
   a. yes
   b. no

10. What does $(x + 2)(a - 1)$ equal?
    a. $-2 + ax - x + 2a$
    b. $2x - 2a$
    c. $x + 2a - 1$
    d. $xa - x + 2a - 1$

11. Bonus: expand $(a + x + y)(b + z + c)$

answer key:

1. F

2. T

3. T

4. T

5. F

6. d

7. e

8. b

9. b

10. a

11. $ab + az + ac + xb + xz + xc + yb + yz + yc$