

Geometry
Unit: Introduction to Proof
Section: Informal and Two Column Proofs

Multiple Choice: Properties

Directions: Choose the correct property.

1. $c = c$

Transitive
Reflexive
Symmetric
Commutative

2. $a(b - c) = ab - ac$

Commutative
Transitive
Distributive
Reflexive

3. $a + 0 = a$

Additive identity
Commutative
Reflexive
Associative

4. If $b = d$, then $d = b$

Reflexive
Symmetric
Transitive
Substitution

5. If $a = b$ and $b = c$, then $a = c$

Distributive
Additive property of equality
Transitive
Reflexive

6. $1a = a$

Reflexive
Multiplicative Identity
Distributive
Associative

7. $a + b = b + a$

Symmetric
Associative
Substitution
Commutative

8. If $a = b$, then $a/c = b/c$

Transitive
Distributive

Division property of equality
Division identity

9. $AB = AB$
Symmetric
Reflexive
Transitive
Addition property of equality

10. Segment $EF =$ Segment FE
Symmetric
Reflexive
Transitive
Addition property of equality

11. If lines $AB \parallel CD$ and $CD \parallel EF$, $AB \parallel EF$
Symmetric
Reflexive
Transitive
Distributive

12. the measure of angle ABC plus the measure of angle dEF equals the measure of angle DEF plus the measure of angle ABD .
Symmetric
Reflexive
Transitive
Distributive

Answers:

1. reflexive
2. distributive
3. additive identity
4. symmetric
5. transitive
6. multiplicative identity
7. commutative
8. division property of equality
9. reflexive
10. symmetric
11. transitive

12. commutative