

## 2-1 Geometry – Converse, Inverse, Contrapositive

Name: \_\_\_\_\_ Time> Start: \_\_\_\_\_ Finish: \_\_\_\_\_ Total Time = \_\_\_\_\_

1. If you are old, you have bad eyesight.

Converse: \_\_\_\_\_

Inverse: \_\_\_\_\_

Contrapositive: \_\_\_\_\_

2. If you are a teacher, you are a hero.

Converse: \_\_\_\_\_

Inverse: \_\_\_\_\_

Contrapositive: \_\_\_\_\_

3. All televisions use electricity.

Converse: \_\_\_\_\_

Inverse: \_\_\_\_\_

Contrapositive: \_\_\_\_\_

4. Consider the statement “If an angle is 90 degrees, then the angle is a right angle.”

a.) Is the converse of this statement true? \_\_\_\_\_

b.) Is the inverse of this statement true? \_\_\_\_\_

c.) Is the contrapositive of this statement true? \_\_\_\_\_

5. Statement: If lines are skew, then they are not coplanar. (2010 SOL Question)

What is the contrapositive of the statement? \_\_\_\_\_

A. If lines are not coplanar, then they are skew.

B. If lines are not skew, then they are coplanar.

C. If lines are coplanar, then they are not skew.

D. If lines are skew, then they are coplanar.

6. Statement: If  $4x = 8$ , then  $x = 2$ . (2009 SOL Question)

What is the inverse of this statement? \_\_\_\_\_

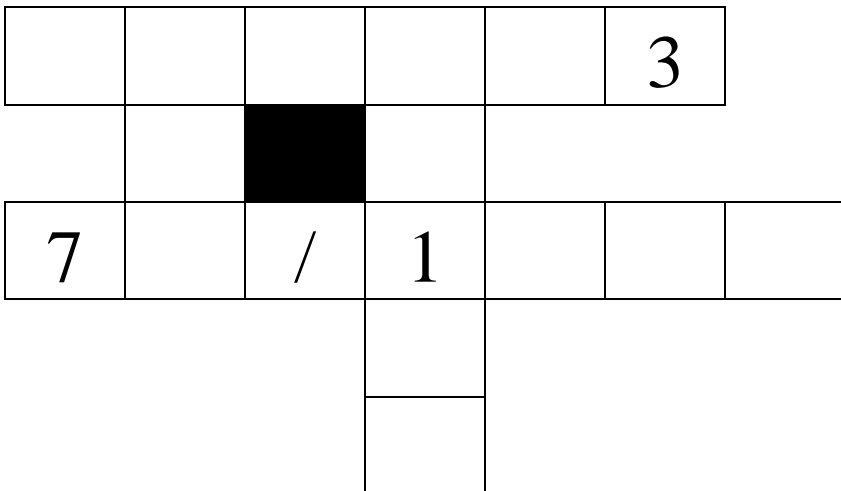
- A. If  $x = 2$ , then  $4x = 8$ .
- B. If  $x \neq 2$ , then  $4x \neq 8$ .
- C. If  $x = 2$ , then  $4x \neq 8$ .
- D. If  $4x \neq 8$ , then  $x \neq 2$ .

7. What is the converse of the following statement? \_\_\_\_\_ (2008 SOL Question)

*If Joe goes fishing, then he needs bait.*

- A. If he needs bait, then Joe goes fishing.
- B. If Joe does not go fishing, then he does not need bait.
- C. If he does not need bait, then Joe does not go fishing.
- D. If Joe goes fishing, then he does not need bait.

## Mabble 3



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