2.2 Homework Answers

1. Converse: If two segments are congruent, then they have the same length.

Biconditional: Two segments have the same length if and only if they are congruent.

2. Converse: If a number is even, then it is divisible by 20.

Biconditional: No Biconditional

3. Converse: If 2x – 5 = 19, then x = 12.

Biconditional: No Biconditional

4. Converse: If an angle is acute, then it measures 23º.

Biconditional: No Biconditional

5. Converse: If a polygon is a triangle, then it has three sides.

Biconditional: A polygon has three sides if and only if it is a triangle.

6. Converse: If you are able to drive, then you are 16 years old.

Biconditional: No biconditional

7. Statement 1: If a line bisects a segment, then the line intersects the segment only at its midpoint.

Statement 2: If a line intersects a segment only at its midpoint, then it bisects the segment.

8. Statement 1: If an integer is divisible by 100, then its last two digits are zeros.

Statement 2: If an integer’s last two digits are zeros, then it is divisible by 100.

9. Statement 1: If two lines are parallel, then they are coplanar and do not intersect.

Statement 2: If two lines are coplanar and do not intersect, then two lines are parallel.

10. Statement 1: If an angle is a straight angle, then it measures 180.

Statement 2: If an angle measures 180, then it is a straight angle.