**PRIMO Lesson 7 Solution**

**Q1:** Simple calculation gives 0.5

**Q2:** We can use the Law of Cosines to find one of the angles and then use the sine rule for the area. Using the Law of Cosines, find angle A opposite side BC:

So, , which means

The area of a triangle can also be found using the Law of Sines:

So, the area is:

Therefore, the area of the triangle is square units.

**Q3.** Using the Law of Sines:

Since angle BAC is obtuse, the obtuse angle is:

Now, we need to find the length of side BC (denoted as c). From we can get . Applying the Law of Cosines, . Therefore, the answers are and .

**Q4.** First realize that

Therefore . Because there are two such triangles,

, .