11.1 Areas of Triangles and Parallelograms

Postulates… (told to you as fact)

Area Congruence Postulate

If two polygons are congruent, then they have the same area.

Area Addition Postulate

The area of a region is the sum of its non-overlapping parts.

Example;

Area of a Square Postulate

The area of a square is the square of the length of its side.

Area of a Rectangle Theorem:

The area of a rectangle is the product of its base and height.

Parallelograms:

Base: either pair of parallel sides can be used as its base

Height: the perpendicular distance between the two bases

Example:

Area of a Parallelogram Theorem:

The area of a parallelogram is the product of a base and its corresponding height

Area of a Triangle Theorem:

The area of a triangle is one half the product of a base and its corresponding height.

1. Find the area of PQRS
2. Find the perimeter and area
3. Find the area of the shaded polygon
4. Find the value of x