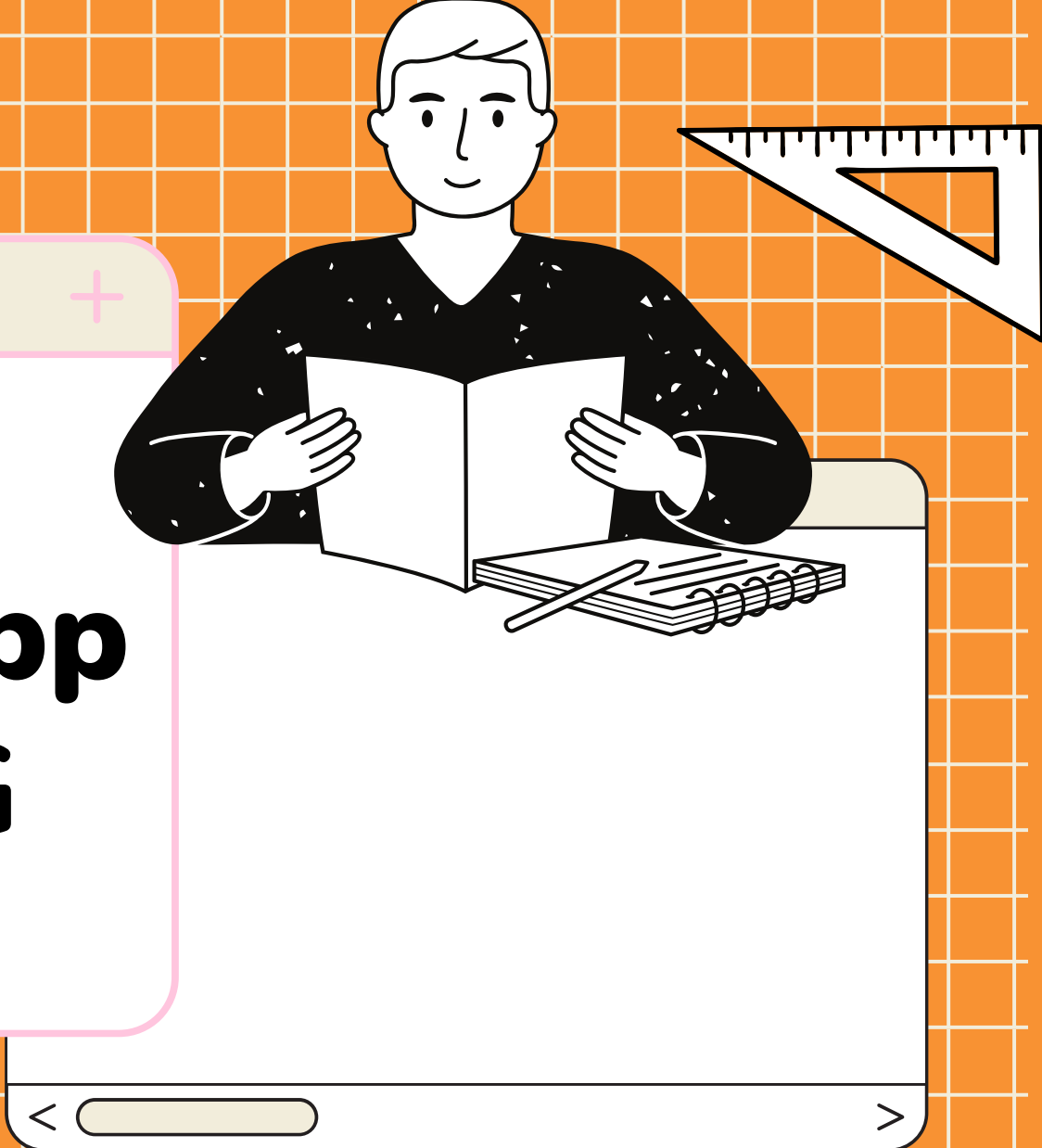
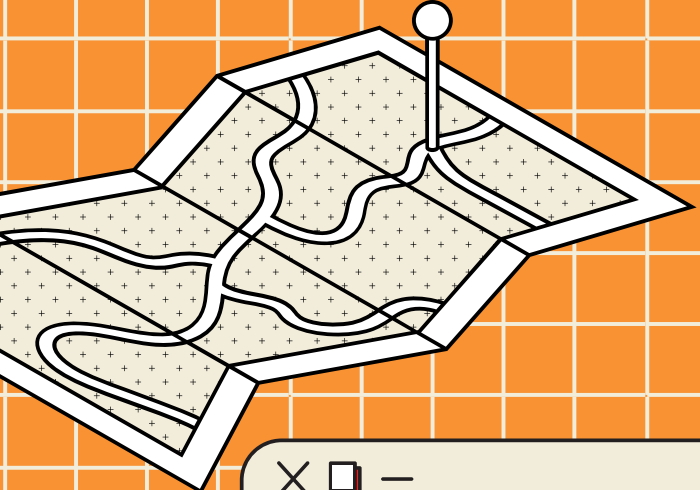
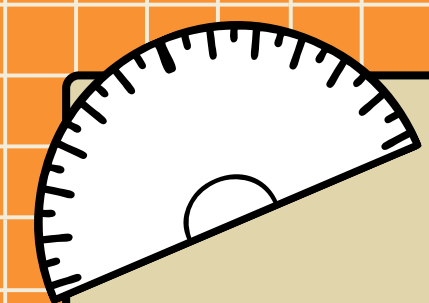




Figures for Icons in Educational App

JOSEF DHANE M. MAGLASANG



FIGURES

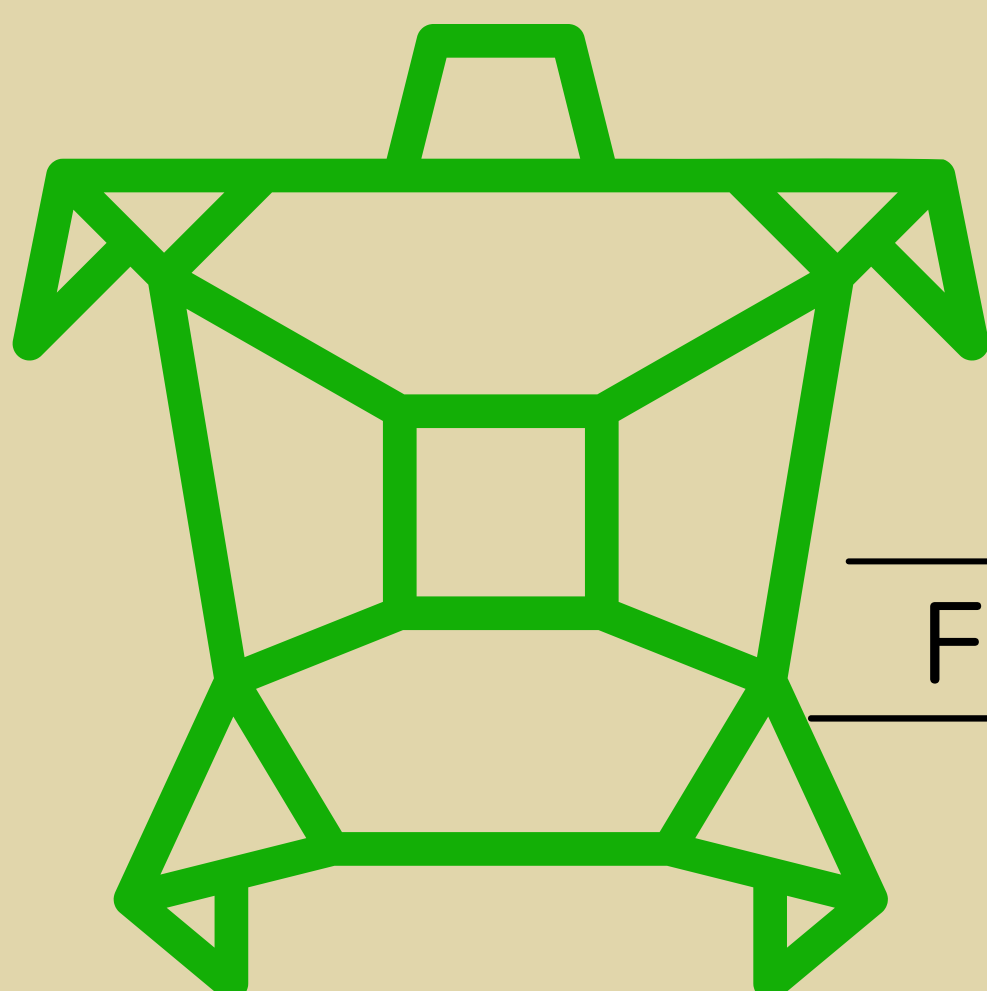


Figure 1. Tortoise

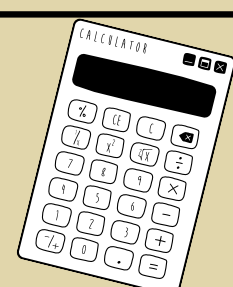


Figure 1 is made up of 1 isosceles trapezoid, 2 acute trapezoids, 2 equilateral triangles, 6 scalene triangles, 1 square, and 2 irregular hexagons. The area of a trapezoid is expressed as $A_{\text{trapezoid}} = \frac{1}{2} (a + b) h$; where 'a' and 'b' are the bases (parallel sides) and 'h' is the height of the trapezoid. In SSS congruence theorem of triangle, if all three pairs of corresponding sides are congruent, the triangles are congruent. In SAS, two pairs of sides and the angle between them are known to be congruent. A square has 4 right angles and 4 equal sides.

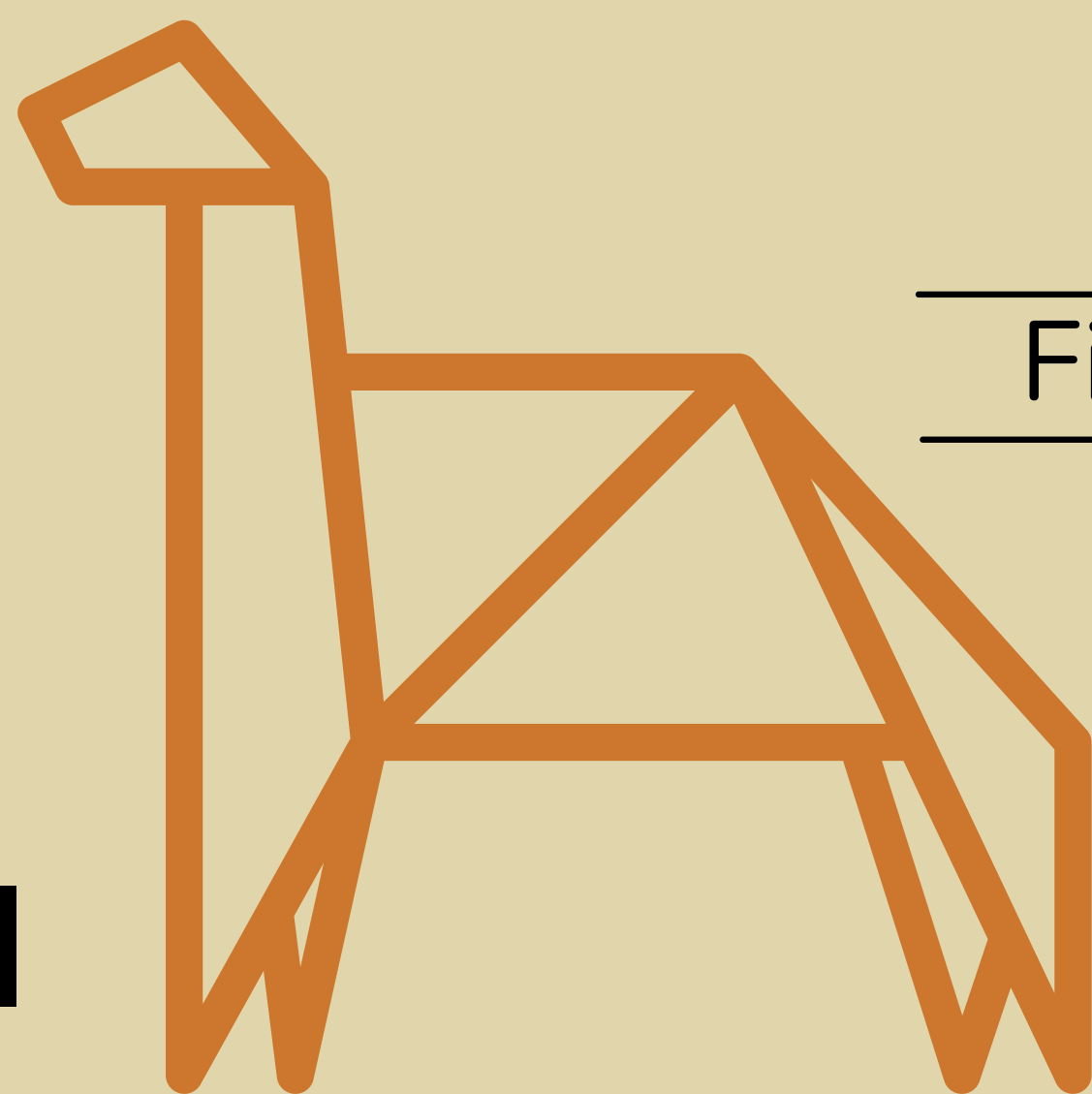


Figure 3. Giraffe

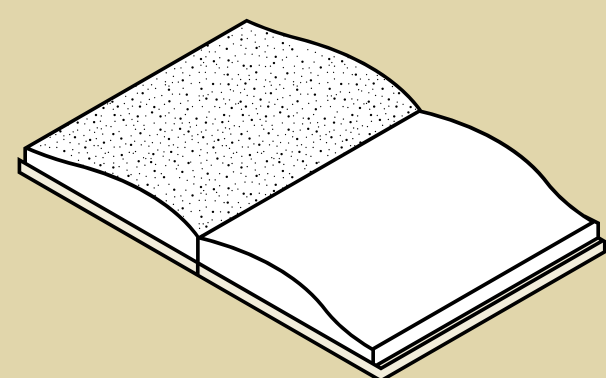


Figure 3 is made up of 1 irregular trapezoid, 1 irregular rhombus that has 1 diagonal dividing in two triangles, 2 scalene triangles, and 2 irregular quadrilaterals. In a rhombus, the diagonals are perpendicular bisectors to each other. This means that diagonals cut each other in half.

Figure 5 is made up of 1 equiangular triangle, 1 parallelogram, 1 circle, 2 rectangles, and other designated rectangles on the figure. The position of the circle is on the inside of the triangle as well as the rectangle with two rectangles on its inner. The area of a shaded region is calculated by taking the difference between the area of an entire polygon and the area of the unshaded region.

Area of shaded region = area of outer shape – an area of the unshaded inner shape

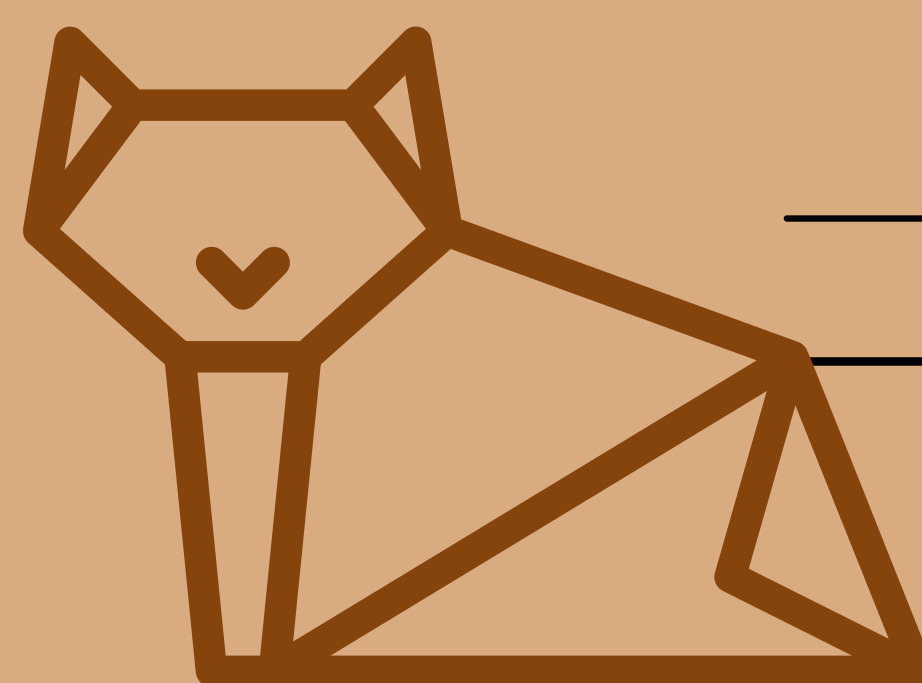


Figure 2. Cat

Figure 2 is made up of 4 scalene triangles, 1 acute trapezoid, 1 irregular hexagon, 1 complex parallelogram, and a point represented by a hearta point is a location represented by a dot. A point does not have any length, width, shape or size, it only has a position. When two distinct points are connected they form a line..

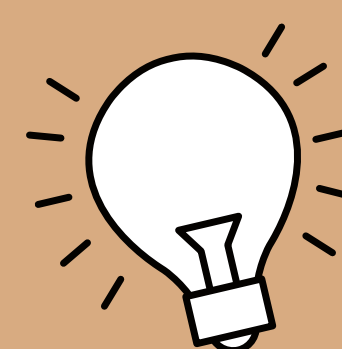
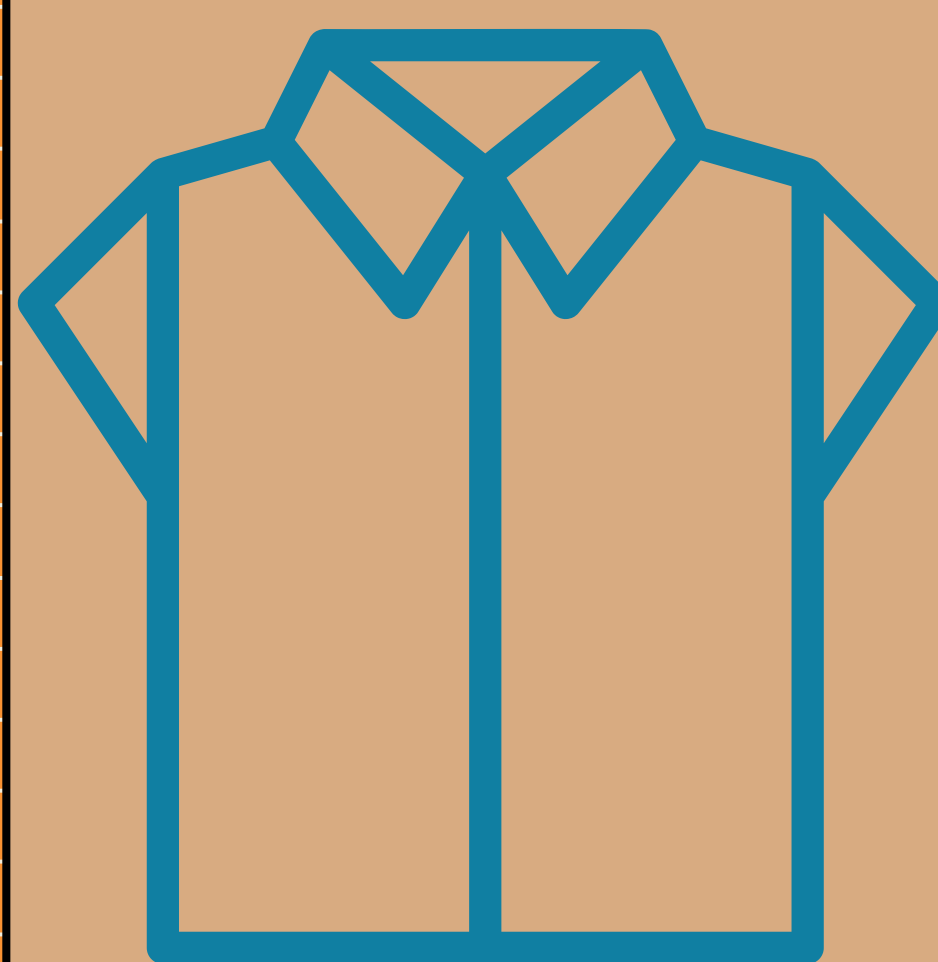


Figure 4. Shirt

Figure 4 is made up of 1 equilateral triangle, 2 scalene triangles, 2 irregular congruent parallelograms, and 2 rectangles. The sum of all three angles of an equilateral triangle is equal to 180 degrees. $60^\circ + 60^\circ + 60^\circ = 180^\circ$. Thus, it obeys the angle sum property of the triangle. An equilateral triangle is also called an equiangular triangle. If the middle side which helps the two rectangles to be adjacent extends to the base of the equilateral triangle, it will divide the triangle into two congruent triangles. The perpendicular drawn from vertex of the equilateral triangle to the opposite side bisects it into equal halves. Also the angle of the vertex from where the perpendicular is drawn is divided into two equal angles, i.e. 30 degrees each.



Figure 5. House

$$\text{AREA OF CIRCLE} = A = \pi \times R^2$$

$$\text{AREA OF RECTANGLE} = A = L \times B$$

$$\text{AREA OF EQUILATERAL TRIANGLE} = \frac{\sqrt{3}}{4} \times (\text{SIDE})^2 \text{ SQUARE UNITS}$$

