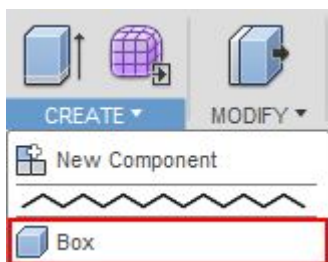


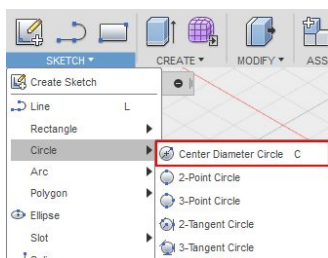
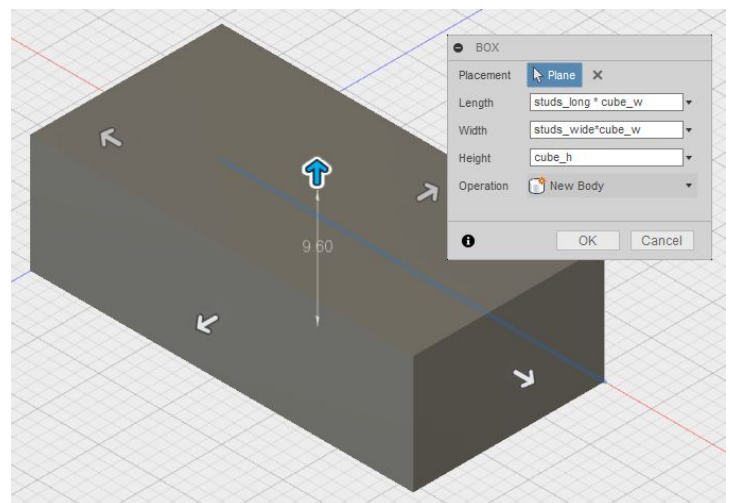
1) Define **parameters** in **Modify->Change parameters**

Parameters					
Parameter	Name	Unit	Expressio	Value	Comments
Favorites					
User Parameters +					
User Parameter	studs_wide		2	2	Number of studs in the z-direction
User Parameter	studs_long		4	4	Number of studs in the x-direction
User Parameter	cube_w	mm	7.8 mm	7.80	Width of a 1x1 lego brick
User Parameter	cube_h	mm	9.6 mm	9.60	Height of a lego brick
User Parameter	stud_d	mm	4.8 mm	4.80	The diameter of a stud
User Parameter	stud_h	mm	1.7 mm	1.70	The height of a stud measured form the top of the cube
Model Parameters					



2) Create a **box**

- Length: $\text{studs_long} * \text{cube_w}$
- Width: $\text{studs_wide} * \text{cube_w}$
- Height: cube_h

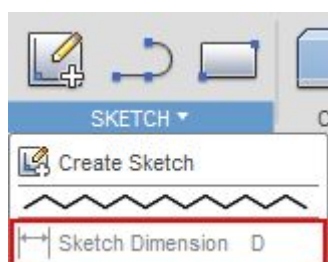
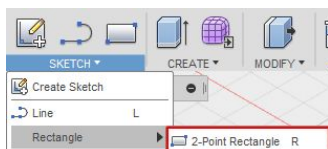
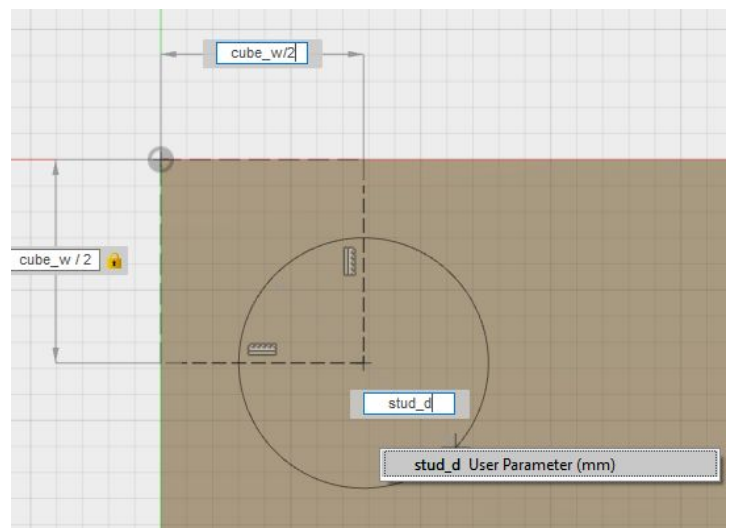


3) Create **sketch** at the top of the box

4) **center diameter circle** with diameter stud_d

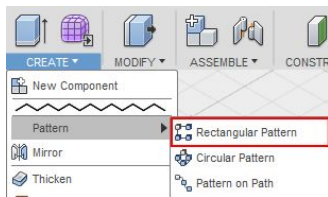
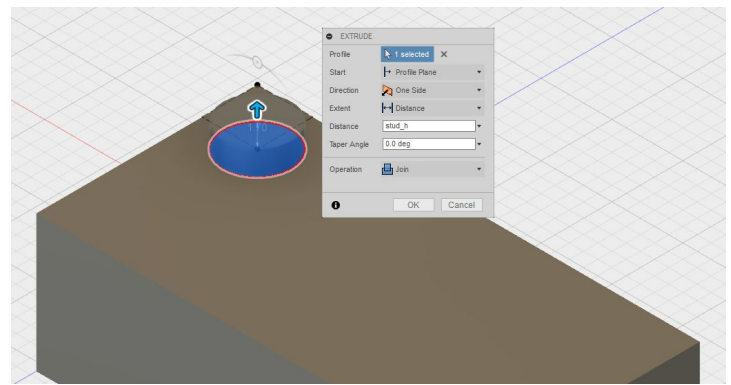
5) **2-point-rectangle** with corners in the corner of the box and the center of the circle

6) **Dimension (D)** the sides of the rectangle to $\text{cube_w}/2$





- 7) **Extrude (E)** the circle stud_h in height



- 8) **Pattern:**

- a) Pattern type: Features
- b) Objects: Extrusion i tidslinja
- c) Directions: Sides of the box
- d) Distance type: Spacing
- e) Quantity: *studs_long* on one, *studs_wide* on the other

