## Basic House types for residential architecture

For the purposes of our course there are 4 basic designs to choose from:   
one-story ranch, 1 ½ story, 2 story and split-level.  
  
TRY THIS: Calculate size necessary for 2400 sq.ft. ranch.   
Compare that to 2 story house.

### One Story Ranch:

### anch.JPG

- It may have a basement depending on where in the country it is built, but may also sit on a crawl-space or slab floor.  
- Chief advantage is that it lends itself to indoor/outdoor living (patios etc…)  
- Absence of stairs (benefits/drawbacks)  
- Low pitched roof and simple construction.  
  
- **Disadvantages**:

* More expensive to build than other others with same square footage (more roof area).
* Heating more expensive for northern climate
* Larger lot

### 1 ½ story:

- Essentially a one-story ranch with a steeper roof so you get an attic space. Often called a "Cape Cod" the 1 1/2 story home was created to maximize living space yet have roof coverage over the 'walls' of the 2nd floor. In North America you get the 1950’s war-homes that are examples of these.  
- Dormers are added to get light into the attic.  
  
- Cost per unit is low.  
- Heating costs are minimized due to outside wall area being relatively small (but hot attics in summer)

  
  
  
  
  
  
**Disadvantages**:

* Impinging ceiling on 2nd floor - any space under 5' in height is not considered to be living space.
* Not suitable for the elderly. Often 1 1/2 story homes have steep switchback stairs.
* If dormers are present, they increase the cost associated with roofing.

### 2 story house:



- Smaller lot requirement  
- Heating and cooling relatively straightforward (heat rises) in the case of supplemental heating (wood stoves)  
- Cooilng is fairly easy because the living space is not in the attic.  
- sleeping space can often (usually) be separated from living spaces, or spaces of high traffic which increases privacy.  
- you can maximize light entering all areas of space.  
  
  
**Disadvantages**:

* Exterior maintenance is more costly.
* 2 stories means staircases.....which are a drawback for elderly or the infirm.
* basement is smaller than the equivalent area ranch home.
* laundry facilities are usually in the basement, which means that laundry must ascend/decent 2 flights of stairs.
* In the case of emergencies, you may have to exit a 2nd story to the ground.

### Split level:

  
- Designs around sloped lots (but a bad idea if it’s a flat lot).  
- Efficient use of space as the general arrangement requires little or no hall space.  
- The basement footprint is about 40-60% of the overall space.  
- The intermediate level (“ground level”) is where patios etc… tend to be.  
- Variations (views of slope and elevation views of house)  
  
**Disadvantages**:

* the living space and entry spaces are usually at different elevations which means constant lugging of goods/materials up short flights of stairs in the home
* even short flights of steps can be difficult for the elderly.
* difficult to heat