Exampel 1: How to use functions to create patten of made-to-measure shirt

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inital state

```
close all; clc; clear all;
warning('off','all');
```

create struct of type 'human'

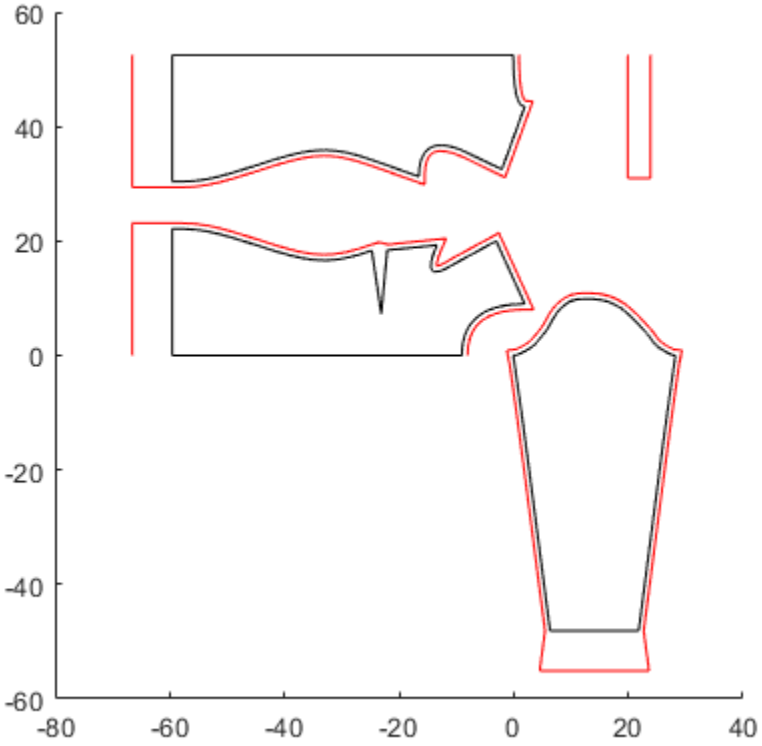
```
% a) for a standard size
% human_example = create_human_from_size('female',36, 'Sam Sample');

% b) for individual measurements
% option 1: direct function input
human_example = create_human_from_measurement('Sam Sample','female',
 33, 23, 40, 87, 63.5, 90.5, 58, 24.4, 15)
%
% option 2: input help
% human_example = create_human_from_measurement;
% save('human_example2', 'human_example');

% c) load existing struct
% load('human_example.mat');
```

```
human_example =

  struct with fields:

                      name: 'SamSample'
                      type: 'female'
               back_length: 33
               seat_length: 23
      rear_shoulder_width: 40
      chest_circumference: 87
      waist_circumference: 63.5000
```

```
        hip_circumference: 90.5000
               arm_length: 58
circumference_upper_arm: 24.4000
    wrist_circumference: 15
```

create pattern

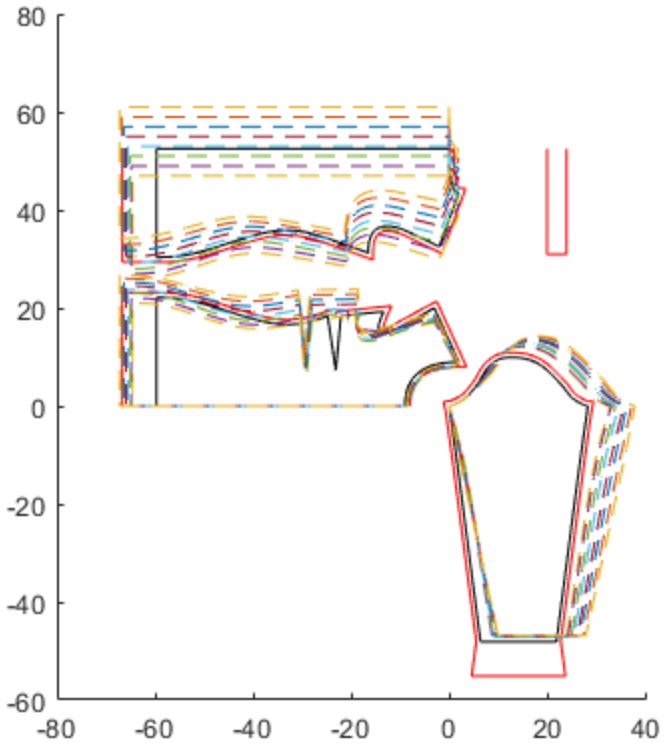
```
pattern =
 create_pattern_shirt(human_example, 'slim', 'long', 'round','simple_cuff');

plot_basic_pattern(pattern);
plot_production_pattern(pattern)
```



optional: visual check of pattern

plot_construction_points(pattern); hold on; plot_construction_points_sleeve(pattern);

```
plot_all_sizes(pattern);
```



create production files

```
create_production_files_lc(human_example, pattern); % laser cutter
%create_production_files_ep(human_example, pattern); % external
 production
```

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