```
%!
% signature - <height> <min> <max> <side> <unit> [<number> ...]
/logline { 11 dict begin
  /list exch def      /unit exch def       /side exch def
  /max exch def       /min exch def        /height exch def

  /offset min ln def
  /scalefactor height max ln offset sub div def

  % vertical line
  currentpoint gsave newpath moveto 0 height rlineto stroke grestore

  % do each tick
  list
  {
    /val exch def
    currentpoint gsave newpath moveto

    % if val is negative, only draw tick mark (and draw it short

    val 0 lt
    {
      % go to right height
      0 val neg ln offset sub scalefactor mul rmoveto
      % draw tick
      side 0.66 mul 0 rlineto 0.35 setlinewidth currentpoint stroke moveto
    }
    % otherwise draw full-size tick and label
    {
      % go to right height
      0 val ln offset sub scalefactor mul rmoveto
      % draw tick
      side 0 rlineto 0.35 setlinewidth currentpoint stroke moveto
      % draw label
      /Helvetica findfont 7 scalefont setfont
      /val val 10 string cvs def

      1 -2 rmoveto
      side 0 lt
        {val stringwidth pop unit stringwidth pop add neg 0 rmoveto
         -2 0 rmoveto}
      if
      val show unit show
    }
    ifelse
    grestore
  } forall

  end
} def




% signature - <height> <width> <min> <max> <side> [<number> ...]
/duallogline { 11 dict begin
  /list exch def       /side exch def      /max exch def
  /min exch def        /width exch def     /height exch def
```

```
  /offset min ln def
  /scalefactor height max ln offset sub div def


  % vertical lines
  currentpoint gsave newpath moveto width -2 div 0 rmoveto 0 height rlineto
  width 0 rmoveto 0 height neg rlineto stroke grestore

  % do each tick
  list
  {
    /val exch def
    currentpoint gsave newpath moveto

    % if val is negative, only draw tick mark (and draw it short

    val 0 lt
    {
      % go to right height
      0 val neg ln offset sub scalefactor mul rmoveto

      % draw ticks
      width -2 div 0 rmoveto
      side 0.66 mul 0 rlineto width side 1.32 mul sub 0 rmoveto
      side 0.66 mul 0 rlineto 0.35 setlinewidth stroke
    }
    % otherwise draw full-size tick and label
    {
      % go to right height (and save it)
      0 val ln offset sub scalefactor mul rmoveto
      currentpoint

      % draw ticks
      width -2 div 0 rmoveto
      side 0 rlineto width side 2 mul sub 0 rmoveto
      side 0 rlineto 0.35 setlinewidth stroke

      % draw label
      moveto
      /Helvetica findfont 7 scalefont setfont
      /val val 10 string cvs def

      val stringwidth pop 2 div neg -2 rmoveto val show
    }
    ifelse
    grestore
  } forall
  end
} def




% signature - <height> <min> <max> <side> [ [<ht> <foodname>]   ...]
/foodlabel { 10 dict begin
  /list exch def      /side exch def
  /max exch def       /min exch def        /height exch def

  /offset min ln def
```

```
  /scalefactor height max ln offset sub div def

  % do each item
  list
  {
    aload pop
    /foodname exch def
    /val exch def
    currentpoint gsave newpath moveto
    % go to right height
    0 val ln offset sub scalefactor mul rmoveto
    % draw tick
    side 0 rmoveto
    % draw label
    /Helvetica findfont 7 scalefont setfont

    1 -2 rmoveto
    side 0 lt
      {foodname stringwidth pop neg 0 rmoveto -2 0 rmoveto}
    if
    foodname show
    grestore
  } forall

  end
} def

% signature <width> <height>
/drawcutout {2 dict
  begin
    /tmpht exch def
    /tmpwd exch def
    gsave
      currentpoint  %save for later
      1 0 0 setrgbcolor 0.5 setlinewidth
      0 tmpht rlineto       tmpwd 0 rlineto       0 tmpht neg rlineto
closepath
      tmpwd tmpht rlineto   tmpwd neg 0 rmoveto   tmpwd tmpht neg rlineto   stroke

      moveto   % use the currentpoint saved above
      tmpwd 2 div tmpht 2 div rmoveto
      currentpoint % save for second word
      /Helvetica-Bold findfont 10 scalefont setfont
      (CUT) dup stringwidth pop -2 div 0 rmoveto show
      moveto 0 -10 rmoveto
      (OUT) dup stringwidth pop -2 div 0 rmoveto show
    grestore
  end
} def


% signature <height> <min> <max> <levelwhoseheightiswanted>
/heightOf  { 6 dict begin
  /val exch def
  /max exch def
  /min exch def
  /height exch def

  /offset min ln def
```

```
  /scalefactor height max ln offset sub div def

  val ln offset sub scalefactor mul
} def

%signature <string to center>
/centershow {dup stringwidth pop -2 div 0 rmoveto show} def


%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%


/inch {72 mul} def

%%% Heights and dimensions of the various bars
/cardht 4.95 inch def               % overall card height
/slidewidth 2.25 inch def           % width of slider
/overlapwidth 2.95 inch slidewidth sub 2 div def  % overlap of the outer card
beyond slider
/cardwidth slidewidth
  overlapwidth 2 mul add def     % overall card width
/calmargin 0.4 inch def          % margin above and below calorie scale
/calht cardht calmargin 2 mul sub def  % calorie bar height

%%% Horizontal offsets into their various "panels" for the scales
/calxoffset slidewidth 2 div  def
/foodxoffset 0.2 inch def
/foodyoffset 0.5 inch def   %% food also has a vertical offset since it sits too
low...

%%% ranges of the various scales
/calmin 30 def       % Calorie Scale min/max
/calmax 1200 def
/foodmin calmin def  % Food List min/max
/foodmax 600 def
/wtmin 10 def        % Weight Scale min/max
/wtmax 400 def

%%% scale the length of each log scale so they all have the same logarithm/inch
%%% The Slide Rule will be the same length as weight scale.
/callogspan calmax ln calmin ln sub def
/wtlogspan wtmax ln wtmin ln sub def
/foodlogspan foodmax ln foodmin ln sub def
/wtht calht wtlogspan mul callogspan div def                    % weight bar height
/foodht calht foodlogspan mul callogspan div def                % food bar height
/hundredgramht wtht wtmin wtmax 100 heightOf def


% do the slider - it has a calorie bar on one side and food on the other
/slidex 0.5 inch def
/slidey 11 inch cardht 2 mul sub 3 div def

% draw cutout guides for use with the a paper cutter
gsave
  0 setcolor 0.25 setlinewidth [4 4] 0 setdash
  0 slidey moveto 8.5 inch 0 rlineto
  0 slidey cardht add moveto 8.5 inch 0 rlineto
  slidex 0 moveto 0 11 inch rlineto
  slidex slidewidth 2 mul add 0 moveto 0 slidey cardht 0.2 inch add add rlineto
```

```
stroke
grestore

% do the box around the slider
gsave
  1 0 0 setrgbcolor 0.5 setlinewidth
  % draw outer box
  slidex slidey moveto
  0 cardht rlineto
  slidewidth 2 mul 0 rlineto
  0 cardht neg rlineto
  closepath stroke
  % draw dashed line up center
  slidex slidewidth add slidey moveto
  0 cardht rlineto
  [ cardht 101 div dup ] 0 setdash stroke
grestore

% put up the "inner slider" signs
gsave
  /Helvetica findfont 8 scalefont setfont
  slidex 3 add slidey cardht 3 add add moveto
  (inner slider - cut out around solid red line) show
  slidex slidewidth add slidey cardht 3 add add moveto
  (fold in half along dashed line and glue or tape together) show
grestore


% do the calorie scale
gsave
  /Helvetica findfont 8 scalefont setfont
  slidex calxoffset add slidey calmargin add moveto

  calht 25 calmin calmax 5
  [30 40 50 60 70 80 90
   100  110  120  130  140 150 -160 -170 -180 -190
   200 -210 -220 -230 -240 250 -260 -270 -280 -290
   300 -310 -320 -330 -340 350 -360 -370 -380 -390
   400 -420 -440 -460 -480
   500 -520 -540 -560 -580
   600 -620 -640 -660 -680
   700 -750
   800 -850
   900 -950
   1000 -1050
   1100 -1150 1200]
  duallogline
grestore


% now do the list of foods bar
gsave
  /Helvetica findfont 8 scalefont setfont
  slidex slidewidth add foodxoffset add
  slidey calmargin add foodyoffset add moveto
  foodht foodmin foodmax 3
  [
  [30 (Fresh vegetables, Strawberries, Onions)]
  [45 (Melons, Peaches, Carrots, Peas)]
```

```
  [55 (Fresh Fruits, Berries)]
  [70 (Grapes)]
  [80 (Applesauce)]
  [90 (Bananas, Potatoes)]
  [100 (Rice, Couscous, Cottage Cheese, Crab)]
  [120 (Corn, Lentils, Flounder, Smoked Salmon)]
  [140 (Pasta, Black Beans, Chickpeas)]
  [160 (Crab Cake, Scrambled Eggs)]
  [180 (Sliced Ham, Veal, Tuna, Salmon)]
  [195 (Roast Turkey/Chicken Breast)]
  [210 (Pork, French Fries)]
  [225 (Steak, Lamb, Ice Cream, French Toast)]
  [245 (Dried Fruit, Hamburgers, Fried Shrimp)]
  [265 (Pep. Pizza, Ground Beef, Salami, Breads)]
  [290 (Honey, Apple Pie, Bagels)]
  [320 (Raisins, Cheesecake, Dry Rice)]
  [360 (Fudge, Cake, Bread, Cheese, Flour, Sugar)]
  [390 (Dry Oatmeal)]
  [480 (Doughnuts, Semi-Sweet Chocolate)]
  [590 (Bacon, Roast Nuts, Peanuts)]
  [710 (Butter)]
  ]
  foodlabel
grestore


% do the outer panel
/foldcount 1 def      % one (pair) of folds to make gap in outer panel
/foldwidth foldcount 2 mul overlapwidth mul def
/cardx 0.5 inch def
/cardy 11 inch cardht 2 mul sub 6 div 5.5 inch add def
/backx cardx cardwidth add foldcount 2 mul overlapwidth mul add def
/fingerwidth 0.75 inch def
/nonfinger cardwidth fingerwidth sub 2 div def
/xctrl 10 def
/yctrl -15 def
/finger {xctrl yctrl fingerwidth xctrl sub yctrl fingerwidth 0 rcurveto} def

% draw the cutting guidelines
gsave
  0 setcolor [4 4] 0 setdash 0.25 setlinewidth
  cardx cardy moveto 0 11 inch cardy sub rlineto
  0 cardy moveto 8.5 inch 0 rlineto
  0 cardy cardht add moveto 8.5 inch 0 rlineto
  cardx cardwidth foldwidth add 2 mul add 0 moveto
  0 11 inch rlineto stroke
grestore



gsave
  % draw the outer box
  1 0 0 setrgbcolor 0.5 setlinewidth
  cardx cardy moveto
  0 cardht rlineto
  2 {nonfinger 0 rlineto finger nonfinger 0 rlineto foldwidth 0 rlineto} repeat
  0 cardht neg rlineto
  /xctrl xctrl neg def
  /yctrl yctrl neg def
```

```
  /fingerwidth fingerwidth neg def
  2 {foldwidth neg 0 rlineto nonfinger neg 0 rlineto finger nonfinger neg 0
rlineto} repeat
  closepath stroke

  % draw the dashed lines
  cardx cardy moveto
  cardwidth 0 rmoveto
  foldcount 2 mul 1 add
  {0 cardht rlineto overlapwidth cardht neg rmoveto} repeat

  cardwidth overlapwidth sub 0 rmoveto
  foldcount 2 mul
  {0 cardht rlineto overlapwidth cardht neg rmoveto} repeat
  [ cardht 101 div dup ] 0 setdash stroke

  %copyright
  /Helvetica findfont 8 scalefont setfont
  0 setgray backx cardwidth 2 div add cardy 20 add yctrl add moveto
  gsave (Copyright 2002-2014 Tiff Hudson Studios) centershow
  grestore 0 -10 rmoveto (www.tiffhudson.com) centershow
grestore


% put up the "outer panel" signs
gsave
  /Helvetica findfont 8 scalefont setfont
  cardx 3 add cardy cardht 3 add add moveto
  (outer panel - cut out around solid red line) show
  cardx cardwidth overlapwidth add add cardy cardht 3 add add moveto
  (accordion fold along dashed lines) centershow
grestore


%%% width of weight bar
/wtwidth 28 def
/wtsplit wtwidth 2 div def

%%%gap to around ends of cutout boxes
/gap 2 def
/gap2 gap 2 mul def

%%% do the cutout box for the weight scale
cardx overlapwidth add calxoffset add wtsplit sub gap add
cardy calmargin add gap sub moveto
wtwidth gap2 sub wtht gap2 add drawcutout

%%%do the cutout box for the food window on the back
/winht 0.5 inch def
/winwd 1.9 inch def
backx overlapwidth add foodxoffset add
cardy calmargin add hundredgramht add foodyoffset add winht 2 div sub moveto
winwd winht drawcutout

%%% Do Blue arrows for the "chosen" food
backx cardy calmargin add hundredgramht add foodyoffset add moveto
gsave
  0 0 1 setrgbcolor 2 setlinewidth
  foodxoffset overlapwidth add 2 sub 0 rlineto 2 0 rmoveto currentpoint
```

```
  -12 5 rmoveto 10 -5 rlineto -10 -5 rlineto moveto
  winwd 2 add 0 rmoveto
  10 5 rmoveto -10 -5 rlineto 10 -5 rlineto -10 5 rmoveto
  cardwidth foodxoffset sub winwd sub overlapwidth sub 2 sub 0 rlineto stroke
grestore


% do the weight bar in grams
gsave
  cardx calxoffset add overlapwidth add cardy calmargin add moveto currentpoint
  /Helvetica-Bold findfont 8 scalefont setfont
  -0.85 inch wtht 0.95 mul rmoveto (Grams) show moveto currentpoint
  -0.85 inch wtht 0.05 mul rmoveto (Grams) show moveto currentpoint
  +0.45 inch wtht 0.95 mul rmoveto (Ounces) show moveto currentpoint
  +0.45 inch wtht 0.05 mul rmoveto (Ounces) show moveto currentpoint
  0 wtht 4 add rmoveto (Calories) centershow moveto currentpoint
  0 -12 rmoveto (Calories) centershow moveto currentpoint

  wtwidth 2 div neg 0 rmoveto
  wtht wtmin wtmax -6 ()
  [ 10 -11 -12 -13 -14 15 -16 -17 -18 -19
    20 -21 -22 -23 -24 25 -26 -27 -28 -29
    30 -31 -32 -33 -34 35 -36 -37 -38 -39
    40 -41 -42 -43 -44 45 -46 -47 -48 -49
    50 -52 -54 -56 -58
    60 -62 -64 -66 -68
    70 -72 -74 -76 -78
    80 -82 -84 -86 -88
    90 -95
    100 110 120 130 140 150 160 -170 180 -190
    200 -210 220 -230 240 -250 260 -270 280 -290
    300 -310 -320 -330 -340 350 -360 -370 -380 -390 400]
  logline

  % now do the ounce version of the weight bar. It's min and max must be
  %  the exact ounce equivalents of the original metric min and max
  moveto currentpoint

  moveto wtwidth 2 div 0 rmoveto
  /ouncemax wtmax 28.35 div def
  /ouncemin wtmin 28.35 div def
  wtht ouncemin ouncemax +6 ()
  [0.4 0.5 0.6 0.7 0.8 0.9
    1 1.1 1.2 1.3 1.4 1.5 -1.6 -1.7 -1.8 -1.9
    2 -2.1 -2.2 -2.3 -2.4 2.5 -2.6 -2.7 -2.8 -2.9
    3 -3.1 -3.2 -3.3 -3.4 3.5 -3.6 -3.7 -3.8 -3.9
    4 -4.1 -4.2 -4.3 -4.4 4.5 -4.6 -4.7 -4.8 -4.9
    5 -5.1 -5.2 -5.3 -5.4 5.5 -5.6 -5.7 -5.8 -5.9
    6 6.5 7 7.5 8 -8.5 9 -9.5 10 -10.5 11 -11.5 12 -12.5 13 -13.5 14]
  logline
grestore


% add instructions for the accordion fold
0 setgray
6.5 inch 4.25 inch moveto
/Helvetica-Bold findfont 8 scalefont setfont
(The accordion fold pattern as viewed) centershow
6.5 inch 4.1 inch moveto
```

```
(from the end of the outer panel...) centershow
1 0 0 setrgbcolor
5.75 inch 3.95 inch moveto
100 0 rlineto 0 -20 rmoveto -100 0 rlineto
1 setlinewidth [] 0 setdash stroke
5.75 inch 3.95 inch moveto
100 0 rmoveto -15 -10 rlineto 15 -10 rlineto -100 0 rmoveto 15 9 rlineto -15 9
rlineto
1 setlinewidth [2 2] 0 setdash stroke
0 setgray
6.5 inch 3.25 inch moveto
(Glue both sides of the dashed portions.) centershow
6.5 inch 3.1 inch moveto
(When glue has dried, the glued folds will form) centershow
6.5 inch 2.95 inch moveto
(a gap that will accomodate the inner slider.) centershow
6.5 inch 2.8 inch moveto
(The picture below shows the slider \(in black\)) centershow
6.5 inch 2.65 inch moveto
(inside the gap in the glued outer panel.) centershow

1 0 0 setrgbcolor
5.75 inch 2.5 inch moveto
100 0 rlineto 0 -4 rmoveto -100 0 rlineto
1 setlinewidth [] 0 setdash stroke
5.75 inch 2.5 inch moveto
0 -2 rmoveto 15 0 rlineto 70 0 rmoveto 15 0 rlineto
3 setlinewidth [0.5 0.5] 0 setdash stroke
0 setgray [] 0 setdash
5.75 inch 2.5 inch moveto
17 -2 rmoveto 66 0 rlineto
1.5 setlinewidth stroke
showpage
```