







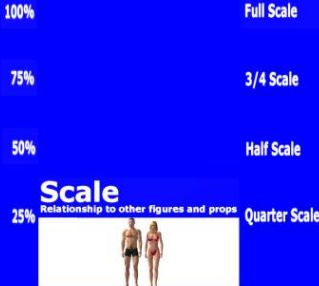


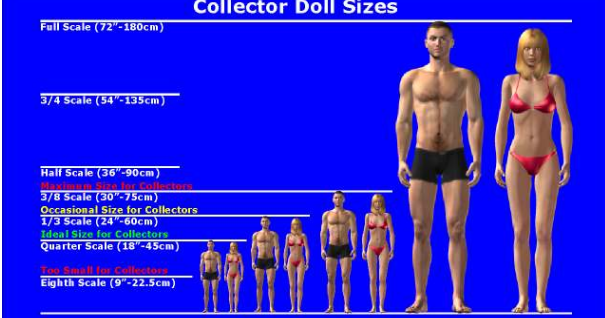
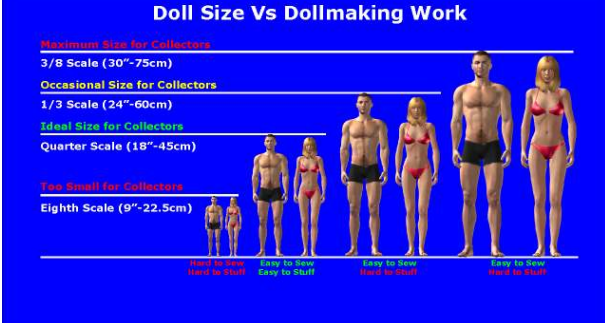
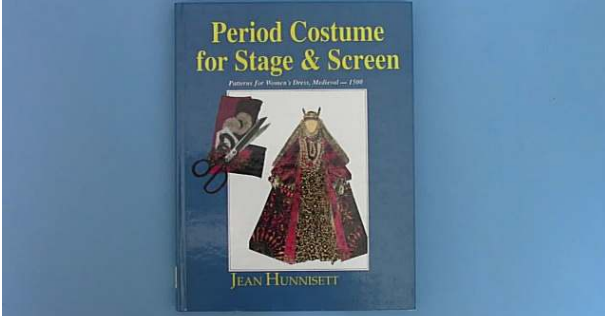


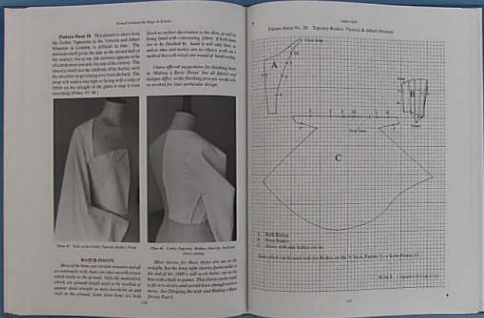
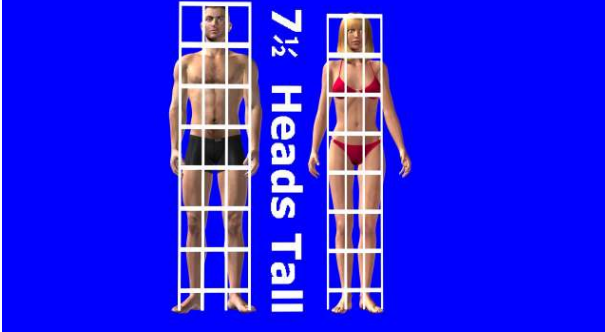

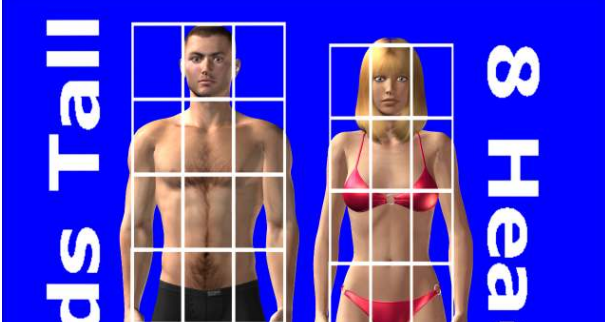
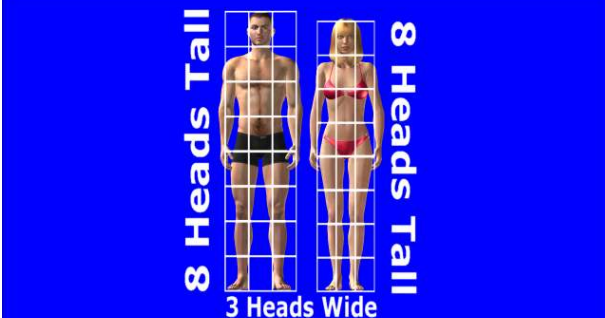
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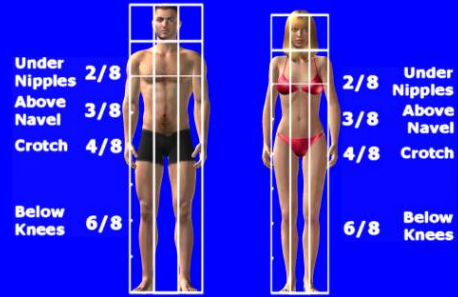
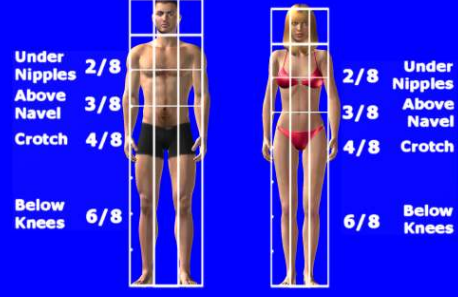
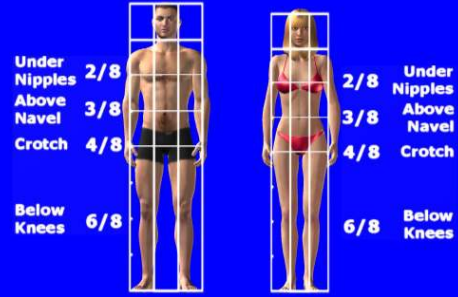
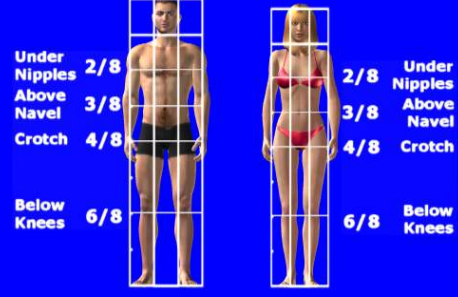
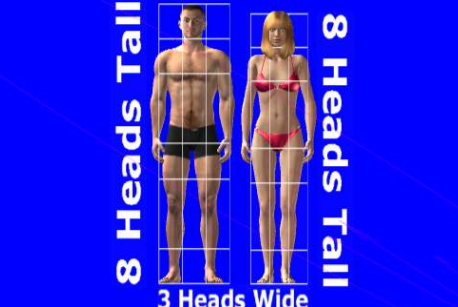
## Anatomy: Scale & Proportion

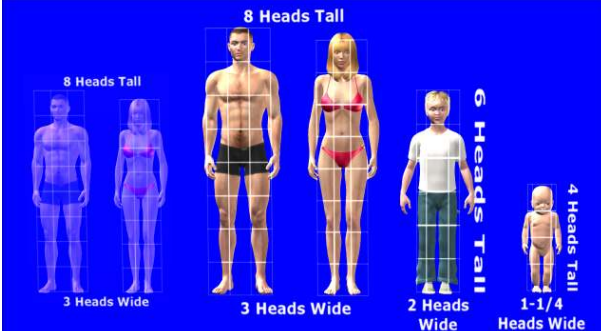
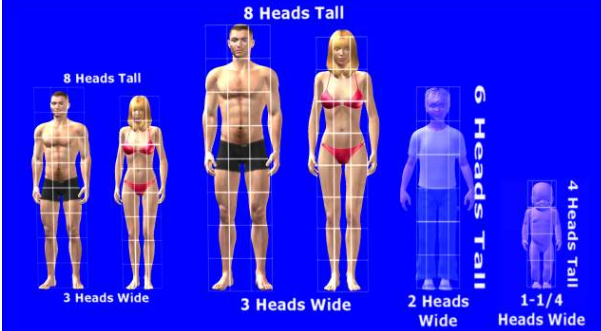
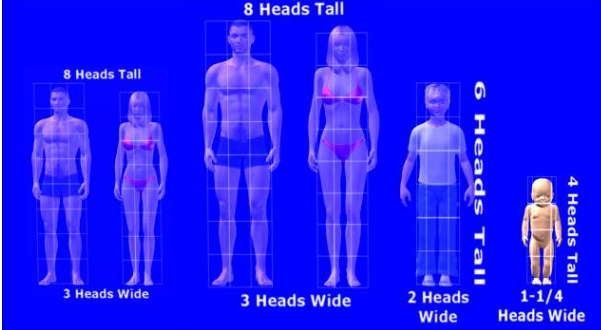
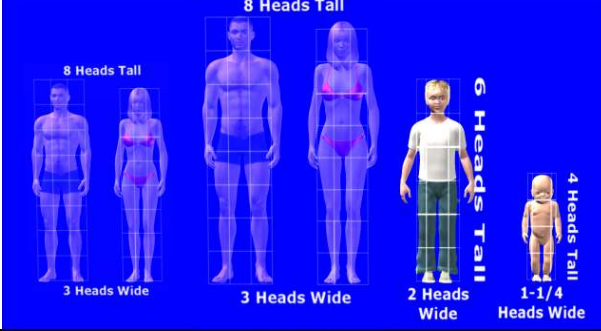
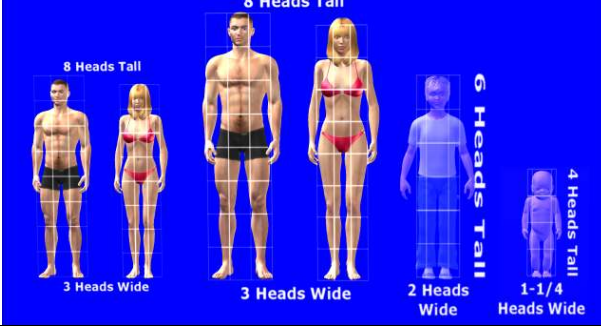
Video	Shot	Soundtrack
 <p>Mimidolls.Com for the serious cloth dollmaker</p> <p>Presents:</p>		
 <p>Mimi's Mannequins</p> <p>Anatomy: Scale &amp; Proportion</p> <p><small>© Gloria J. "Mimi" Winer &amp; Jim Winer Mimidolls.Com</small></p>		
 <p>Mimi's Mannequins Male &amp; Female Cloth Dolls</p> <p>4-Day Cloth Dollmaking Workshop 2-Day Pattern Draping Workshop Classroom on a DVD</p> <p>Visit Mimidolls.Com for Ordering Information</p>		
 <p>Two 3D digital models of a male and a female human figure standing side-by-side against a blue background. The male model is on the left, wearing black briefs. The female model is on the right, wearing a red bikini.</p>	1.4.1	This is Victoria and Michael. They are 3-dimensional models of the human body by DAZ Studios. They are displayed in the Poser animation program.

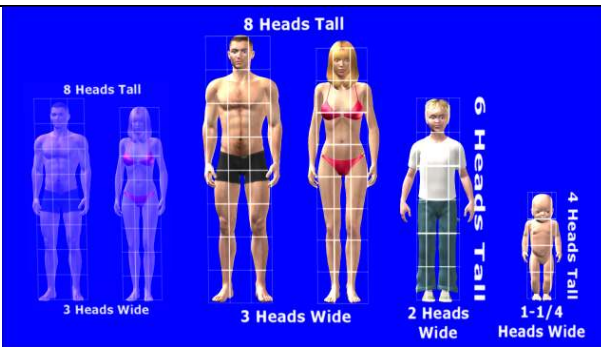
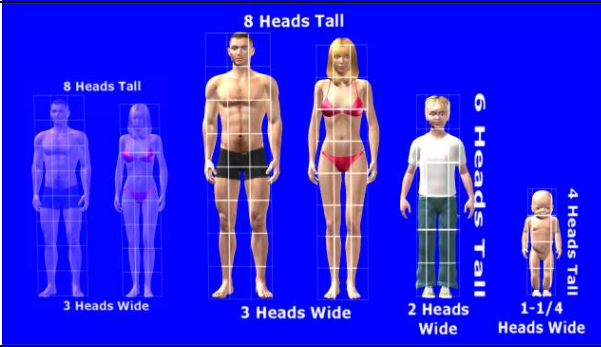



Video	Shot	Soundtrack
	1.4.2	<p>When Mimi makes a doll with an extreme pose, I model it first in Poser. When she approves the model, I print out front, sides, and back views in the size that she uses for dolls.</p>
	1.4.3	<p>Then she sculpts any necessary pieces in clay and drapes them to create the doll pattern. When the doll is sewn and stuffed, she adjusts the pattern for any corrections and makes a new doll.</p>
	1.4.4	<p>When the finished dolls look like the sculpture, we have a new doll pattern.</p>
	1.4.5	<p>When Mimi makes a doll, she uses quarter scale, that is: <math>\frac{1}{4}</math> life-size or,</p> <ul style="list-style-type: none"> <li>• <math>\frac{1}{4}</math> inch on the doll = 1 inch on a real person, or</li> <li>• 1 cm on the doll = 4 cm on a real person.</li> </ul> <p>Scale determines the relationship of the doll to other figures and to props.</p>
	1.4.6	<p>Quarter scale is convenient because:</p>


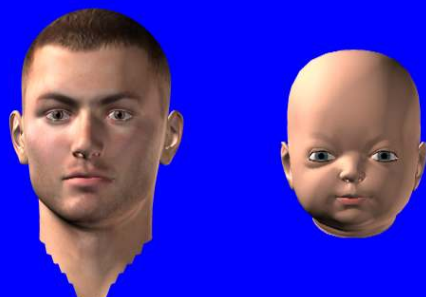


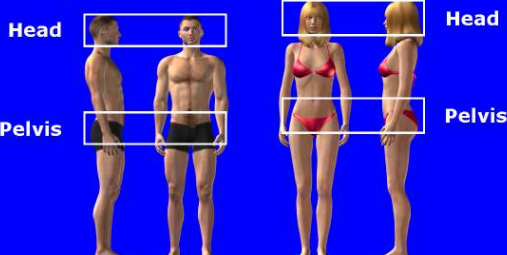
Video	Shot	Soundtrack
	1.4.7	<ul style="list-style-type: none"> <li>Many objects are available in quarter-scale size.</li> </ul>
	1.4.8	<ul style="list-style-type: none"> <li>Many fabrics and trims are available with patterns suitable for quarter-scale.</li> </ul>
<p><b>Collector Doll Sizes</b></p>  <p>Full Scale (72"-180cm)</p> <p>3/4 Scale (54"-135cm)</p> <p>Half Scale (36"-90cm)</p> <p>Maximum Size for Collectors</p> <p>3/8 Scale (30"-75cm)</p> <p>Occasional Size for Collectors</p> <p>1/3 Scale (24"-60cm)</p> <p>Ideal Size for Collectors</p> <p>Quarter Scale (18"-45cm)</p> <p>Too Small for Collectors</p> <p>Eighth Scale (9"-22.5cm)</p>	1.4.9	<ul style="list-style-type: none"> <li>Quarter-scale dolls are a convenient size for collectors. At 15 to 19-inches tall, they don't take up too much space.</li> </ul>
<p><b>Doll Size Vs Dollmaking Work</b></p>  <p>Maximum Size for Collectors</p> <p>3/8 Scale (30"-75cm)</p> <p>Occasional Size for Collectors</p> <p>1/3 Scale (24"-60cm)</p> <p>Ideal Size for Collectors</p> <p>Quarter Scale (18"-45cm)</p> <p>Too Small for Collectors</p> <p>Eighth Scale (9"-22.5cm)</p> <p>Hard to Sew Hard to Stuff</p> <p>Easy to Sew Easy to Stuff</p> <p>Hard to Sew Hard to Stuff</p> <p>Easy to Sew Easy to Stuff</p>	1.4.10	<ul style="list-style-type: none"> <li>Quarter scale dolls are the easiest to make. They are easier to sew than smaller dolls. They take less work to stuff than larger dolls.</li> </ul>
	1.4.11	<ul style="list-style-type: none"> <li>Most costume books have eighth-scale pattern sheets.</li> </ul> <p>(Eighth-scale pattern sheets fit conveniently on the page size of the books.)</p>

Video	Shot	Soundtrack
	1.4.12	<p>Eighth-scale patterns are too small for human fingers.</p> <p>So double the patterns on a computer or a copy machine and you have quarter-scale patterns, ready to use.</p> <p>(To double the size of a pattern on a copy machine, make a copy at 150% and then copy the copy at 133%)</p>
	1.4.13	<p>Proportion is the relationship between a figure and parts of itself.</p> <p>Most adults are 7-1/2 heads tall.</p> <p>That is, if you measure from the top of the head to the bottom of the chin, the total height of the figure is 7-1/2 times the height of the head.</p> <p>This is very inconvenient mathematically. Things don't line up.</p>
	1.4.14	<p>For artistic figures (such as dolls), we usually use 8 heads rather than 7-1/2. It makes things much easier and looks better than real life.</p>
	1.4.15	<p>The head is usually narrower than it is tall. Most adults have a head that is about one third as wide as their shoulders.</p>
	1.4.16	<p>So adult doll figures are about 8 times as high as the head and 3 times as wide as the head.</p>

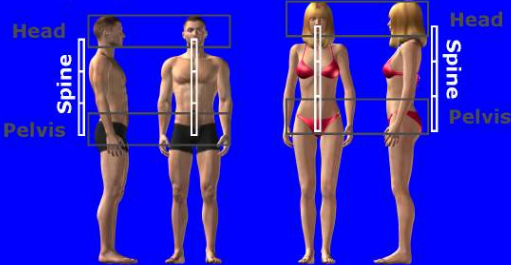
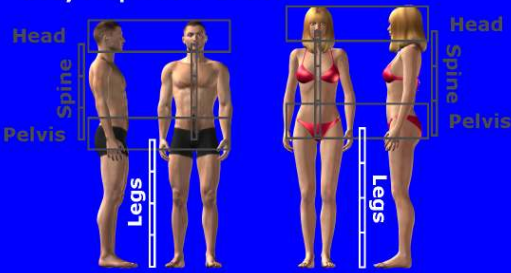


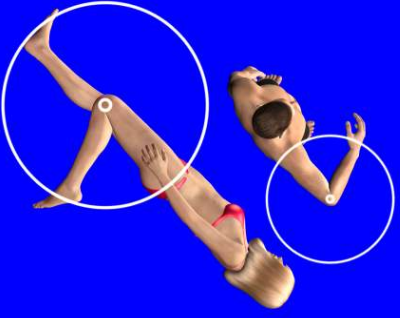
Video	Shot	Soundtrack
	1.4.17	<ul style="list-style-type: none"> <li>A line drawn under the second head-length is just below the nipples.</li> </ul>
	1.4.18	<ul style="list-style-type: none"> <li>A line drawn under the third head-length is just above the navel.</li> </ul>
	1.4.19	<ul style="list-style-type: none"> <li>A line drawn under the fourth head-length is at the base of the genitals almost at the croch.</li> </ul>
	1.4.20	<ul style="list-style-type: none"> <li>A line drawn under the sixth head-length is just below the knees.</li> </ul>
 <p style="text-align: center;"><b>8 Heads Tall</b> 3 Heads Wide</p>	1.4.21	<p>Adult figures are 8 head-lengths tall and 3 head-widths wide.</p>



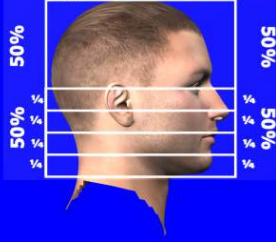


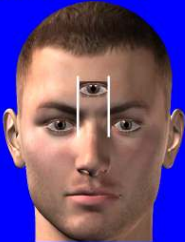
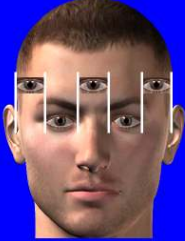
Video	Shot	Soundtrack
 <p>8 Heads Tall</p> <p>8 Heads Tall</p> <p>3 Heads Wide</p> <p>3 Heads Wide</p> <p>6 Heads Tall</p> <p>2 Heads Wide</p> <p>4 Heads Tall</p> <p>1-1/4 Heads Wide</p>	1.4.22	Proportion changes with <b>age</b> . Younger people have larger heads in proportion to their bodies.
 <p>8 Heads Tall</p> <p>8 Heads Tall</p> <p>3 Heads Wide</p> <p>3 Heads Wide</p> <p>6 Heads Tall</p> <p>2 Heads Wide</p> <p>4 Heads Tall</p> <p>1-1/4 Heads Wide</p>	1.4.23	Proportion does not change with <b>scale</b> .
 <p>8 Heads Tall</p> <p>8 Heads Tall</p> <p>3 Heads Wide</p> <p>3 Heads Wide</p> <p>6 Heads Tall</p> <p>2 Heads Wide</p> <p>4 Heads Tall</p> <p>1-1/4 Heads Wide</p>	1.4.24	Babies are approximately 4 heads tall and 1¼ heads wide. Their heads are very large in proportion to their bodies.
 <p>8 Heads Tall</p> <p>8 Heads Tall</p> <p>3 Heads Wide</p> <p>3 Heads Wide</p> <p>6 Heads Tall</p> <p>2 Heads Wide</p> <p>4 Heads Tall</p> <p>1-1/4 Heads Wide</p>	1.4.25	Twens are approximately 6 heads tall and 2 heads wide.
 <p>8 Heads Tall</p> <p>8 Heads Tall</p> <p>3 Heads Wide</p> <p>3 Heads Wide</p> <p>6 Heads Tall</p> <p>2 Heads Wide</p> <p>4 Heads Tall</p> <p>1-1/4 Heads Wide</p>	1.4.26	No matter what scale adults are, they are always proportionately 8 heads tall and 3 heads wide.


Video	Shot	Soundtrack
	1.4.27	Unless the proportions match the apparent age of the figure, we find the doll jarring or unpleasant.
	1.4.28	You can indicate the age of the doll just by adjusting the proportions.
<p><b>Average Figures</b></p> 	1.4.29	Changing the size of the body does not change the relative sizes of body parts. Changing the body size allows for different physiques:
<p><b>Average Figures</b></p> 	1.4.30	<ul style="list-style-type: none"> <li>The models show an <i>Average</i> figure in Short, Medium, and Tall.</li> </ul>
<p><b>Different Physiques</b></p> 	1.4.31	<ul style="list-style-type: none"> <li>Widening the Short figure gives a <i>Short/Stocky</i> figure.</li> </ul>

Video	Shot	Soundtrack
<p><b>Different Physiques</b></p>  <p>Stocky Short Medium Tall Thin</p>	1.4.32	<ul style="list-style-type: none"> <li>Narrowing the Tall figure gives a <i>Tall/Thin</i> figure.</li> </ul>
	1.4.33	<ul style="list-style-type: none"> <li>Making the head larger with respect to the body gives a younger appearance. Babies have very large heads, but the face features are all squeezed into the lower third of the face.</li> </ul>
<p><b>Different Physiques</b></p>  <p>Stocky Short Medium Tall Thin</p>	1.4.34	Changes in size (at the same age) do not affect the proportion or relative size of the body parts to one another.
<p><b>Body Scale changes. Body Proportions do not.</b></p> 	1.4.35	Changing the size of a figure changes the body scale. It does not change the body proportions.
<p><b>Body Scale changes. Body Proportions do not.</b></p>  <p>Head Pelvis Head Pelvis</p>	1.4.36	The head remains the same length as the pelvis.



Video	Shot	Soundtrack
<p><b>Body Scale changes. Body Proportions do not.</b></p> 	1.4.37	The spine remains the same length of 3 heads.
<p><b>Body Scale changes. Body Proportions do not.</b></p> 	1.4.38	The legs remain the same relative length of 4 heads.
	1.4.39	The hand extends from the chin to the middle of the forehead (where the third eye would be).
	1.4.40	Similarly, the hand is the same length as the foot not including the toes.
	1.4.41	<p>The distance from the shoulder to the elbow is the same as the distance from the elbow to the palm of the hand.</p> <p>The distance from the hip to the knee is the same as the distance from the knee to the bottom of the heel.</p>

Video	Shot	Soundtrack
<p><b>Face Feature Location</b></p> <p>Adult Eyes: Halfway from top to bottom of Face</p>  <p>Baby Eyes: 60% (3/5) from top to bottom of Face</p> 	1.4.42	<p>The facial features also have proportional locations.</p> <p>For an adult, the eyes are exactly halfway down the head. In the drawing, the bottom of the head has been divided into fourths. The nose and mouth are located as shown in the drawings.</p>
<p><b>Face Feature Location</b></p> <p>Adult Eyes: Halfway from top to bottom of Face</p>  <p>Baby Eyes: 60% (3/5) from top to bottom of Face</p> 	1.4.43	<p>For younger people, the features are squeezed together in the lower part of the face.</p>
<p><b>Feature Location</b></p> <p>Eyes:</p> 	1.4.44	<p>The size of the eyes is proportional to the width of the head.</p>
<p><b>Feature Location</b></p> <p>Eyes: An eye-length between</p> 	1.4.45	<p>There is an eye-length between the eyes,</p>
<p><b>Feature Location</b></p> <p>Eyes: An eye-length between and at each side</p> 	1.4.46	<p>and another eye-length at each side.</p>

Video	Shot	Soundtrack
<p><b>Scale:</b> The relationship of the figure to other figures and to props.</p>	1.4.47	Scale determines the relationship of the figure to other figures and to objects.
<p><b>Proportion:</b> The relationship of parts to the whole figure.</p>	1.4.48	Proportion determines the relationship of parts to the whole figure.
	1.4.49	Happy Dolling!
<p><b>Mimi's Mannequins</b> <i>Male &amp; Female Cloth Dolls</i></p> <p>4-Day Cloth Dollmaking Workshop 2-Day Pattern Draping Workshop Classroom on a DVD</p> <p>Visit <a href="http://Mimidolls.Com">Mimidolls.Com</a> for Ordering Information</p>		
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