

**TABLE B.4**    The Studentized Range Statistic ( $q$ )

The critical values for  $q$  correspond to  $\alpha = .05$  (lightface type) and  $\alpha = .01$  (boldface type).

$df_{\epsilon}$	Range								
	2	3	4	5	6	7	8	9	10
6	3.46 <b>5.24</b>	4.34 <b>6.32</b>	4.90 <b>7.02</b>	5.30 <b>7.55</b>	5.63 <b>7.98</b>	5.91 <b>8.33</b>	6.13 <b>8.62</b>	6.32 <b>8.87</b>	6.50 <b>9.10</b>
7	3.34 <b>4.95</b>	4.17 <b>5.91</b>	4.68 <b>6.54</b>	5.06 <b>7.00</b>	5.36 <b>7.38</b>	5.60 <b>7.69</b>	5.82 <b>7.94</b>	5.99 <b>8.17</b>	6.15 <b>8.38</b>
8	3.26 <b>4.75</b>	4.05 <b>5.64</b>	4.53 <b>6.21</b>	4.89 <b>6.63</b>	5.17 <b>6.97</b>	5.41 <b>7.26</b>	5.60 <b>7.47</b>	5.78 <b>7.70</b>	5.93 <b>7.89</b>
9	3.20 <b>4.60</b>	3.95 <b>5.43</b>	4.42 <b>5.95</b>	4.76 <b>6.34</b>	5.03 <b>6.67</b>	5.24 <b>6.91</b>	5.43 <b>7.13</b>	5.60 <b>7.33</b>	5.74 <b>7.50</b>
10	3.15 <b>4.48</b>	3.88 <b>5.27</b>	4.33 <b>5.77</b>	4.66 <b>6.14</b>	4.92 <b>6.43</b>	5.12 <b>6.67</b>	5.30 <b>6.89</b>	5.46 <b>7.06</b>	5.60 <b>7.22</b>
11	3.11 <b>4.38</b>	3.82 <b>5.16</b>	4.27 <b>5.63</b>	4.59 <b>5.98</b>	4.83 <b>6.25</b>	5.03 <b>6.48</b>	5.21 <b>6.69</b>	5.36 <b>6.85</b>	5.49 <b>7.01</b>
12	3.08 <b>4.32</b>	3.78 <b>5.05</b>	4.20 <b>5.50</b>	4.51 <b>5.84</b>	4.75 <b>6.10</b>	4.96 <b>6.32</b>	5.12 <b>6.52</b>	5.26 <b>6.67</b>	5.39 <b>6.82</b>
13	3.05 <b>4.26</b>	3.73 <b>4.97</b>	4.15 <b>5.41</b>	4.47 <b>5.74</b>	4.69 <b>5.98</b>	4.88 <b>6.19</b>	5.06 <b>6.39</b>	5.21 <b>6.53</b>	5.33 <b>6.68</b>
14	3.03 <b>4.21</b>	3.70 <b>4.90</b>	4.11 <b>5.33</b>	4.41 <b>5.64</b>	4.64 <b>5.88</b>	4.83 <b>6.10</b>	4.99 <b>6.28</b>	5.13 <b>6.41</b>	5.25 <b>6.56</b>
15	3.01 <b>4.17</b>	3.68 <b>4.84</b>	4.09 <b>5.26</b>	4.38 <b>5.56</b>	4.59 <b>5.80</b>	4.79 <b>6.01</b>	4.95 <b>6.18</b>	5.09 <b>6.31</b>	5.21 <b>6.46</b>
16	2.99 <b>4.13</b>	3.65 <b>4.79</b>	4.05 <b>5.19</b>	4.33 <b>5.50</b>	4.56 <b>5.72</b>	4.74 <b>5.94</b>	4.89 <b>6.10</b>	5.03 <b>6.23</b>	5.15 <b>6.37</b>
17	2.98 <b>4.10</b>	3.63 <b>4.75</b>	4.02 <b>5.15</b>	4.30 <b>5.44</b>	4.52 <b>5.66</b>	4.70 <b>5.86</b>	4.85 <b>6.02</b>	4.99 <b>6.14</b>	5.11 <b>6.28</b>
18	2.97 <b>4.07</b>	3.62 <b>4.71</b>	4.01 <b>5.10</b>	4.29 <b>5.39</b>	4.49 <b>5.60</b>	4.68 <b>5.80</b>	4.84 <b>5.95</b>	4.97 <b>6.08</b>	5.08 <b>6.21</b>
19	2.96 <b>4.05</b>	3.59 <b>4.68</b>	3.98 <b>5.05</b>	4.26 <b>5.35</b>	4.47 <b>5.56</b>	4.65 <b>5.75</b>	4.80 <b>5.91</b>	4.93 <b>6.03</b>	5.04 <b>6.15</b>
20	2.95 <b>4.02</b>	3.58 <b>4.64</b>	3.96 <b>5.02</b>	4.24 <b>5.31</b>	4.45 <b>5.51</b>	4.63 <b>5.71</b>	4.78 <b>5.86</b>	4.91 <b>5.98</b>	5.01 <b>6.09</b>
22	2.94 <b>3.99</b>	3.55 <b>4.59</b>	3.93 <b>4.96</b>	4.20 <b>5.27</b>	4.41 <b>5.44</b>	4.58 <b>5.62</b>	4.72 <b>5.76</b>	4.85 <b>5.87</b>	4.96 <b>6.00</b>