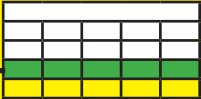



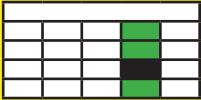






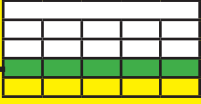


Worksheets A2.a-d: For use with Table 9.1 (Monthly loan payments:2-30 years) and Table 9.5 (Monthly loan payments:1-12 months).

(a) Determining a Monthly Payment	
Inputs Needed: Rate, Duration, Principal	
1. Enter <i>Rate</i> (in annual percent):	
2. Enter <i>Duration</i> :	
3. Locate row with <i>Rate</i> .	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Rate —</div>  </div>
4. Locate column with <i>Duration</i> .	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Duration —</div>  </div>
5. Enter value from box at the row-column intersection:	
6. Enter <i>Principal</i> (in dollars):	
7. Divide Box 6 by 1000.	
8. Multiply Box 5 by Box 7 for the <i>Monthly Payment</i> :	

(b) Determining a Rate	
Inputs Needed: Principal, Monthly Payment, Duration	
1. Enter <i>Principal</i> (in dollars):	
2. Divide Box 1 by 1000.	
3. Enter <i>Monthly Payment</i> (in dollars):	
4. Divide Box 3 by Box 2.	
5. Enter <i>Duration</i> :	
6. Locate column with <i>Duration</i> .	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Duration —</div>  </div>
7. Find the value in the duration column closest to the value in Box 4.	
8. Result is the <i>Rate</i> for the corresponding row:	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Rate —</div>  </div>

For examples see Chapter 9: Examples 9.1 through 9.4, 9.16 and 9.17.

(c) Determining a Duration	
Inputs Needed: <i>Principal, Monthly Payment, Rate</i>	
1. Enter <i>Principal</i> (in dollars):	
2. Divide Box 1 by 1000.	
3. Enter <i>Monthly Payment</i> (in dollars):	
4. Divide Box 3 by Box 2.	
5. Enter <i>Rate</i> (in annual percent):	
6. Locate row with the <i>Rate</i> .	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Rate →</div>  </div>
7. Find the value in the rate row closest to the value in Box 4.	
8. Result is the <i>Duration</i> for the corresponding column:	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Duration →</div>  </div>

(d) Determining a Principal	
Inputs Needed: <i>Rate, Duration, Monthly Payment</i>	
1. Enter <i>Rate</i> (in annual percent):	
2. Enter <i>Duration</i> :	
3. Locate row with <i>Rate</i> .	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Rate →</div>  </div>
4. Locate column with <i>Duration</i> .	<div style="display: flex; align-items: center;"> <div style="margin-right: 10px;">Duration →</div>  </div>
5. Enter value from box at the row-column intersection:	
6. Enter <i>Monthly Payment</i> (in dollars):	
7. Divide Box 6 by Box 5.	
8. Multiply Box 7 by 1000 for the <i>Principal</i> :	