Introduction to Mathematics with Maple: Maple 8 and Maple 9 update

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Maple update

The use of *Maple* in this book is rather basic and there are only a few minor changes needed for the use of either *Maple* 8 or *Maple 9*. These are listed below.

Page 16 *Original text:*

```
> Digits:=3
```

...

would stop.

Replacement for both Maple 8 and Maple 9:

```
> Digits:=3:  1/(22-7*sqrt(2)-7*sqrt(3));
```

$$\left(22 - 7\sqrt{2} - 7\sqrt{3}\right)^{-1}$$

```
> 1/(22-7*sqrt(2.0)-7*sqrt(3.0));
```

$$Float(\infty)$$

This result means that *Maple's* answer is a number so large that it is out of computer's reach. If the above symbol appeared somewhere in a long calculation the process would either stop or the result would be erroneous.

Page 28 *Comment:Maple* 8 and *Maple* 9 contain $\_Z1$ and $\_Z2$ instead of original's $\_N1$ and $\_N2$, respectively. This is inessential.

Page 75 *Comment:*
Maple 9 gives the correct answer and there is no need for any simplification which followed in the original text on pages 76—77.

Page 80 *Comment:*
Maple 8 and *Maple* 9 give `false` instead of *Maple* 7 `Fail`. We ought to understand this as saying that the inequality is not true for *all* x.

Page 223 *Comment:*
Our approach to solving the equation `ceq` was intentionally clumsy in order to show that there were some problems in simplification of the result on top of page 223. *Maple* 9, however, was able to cope with the imperfect approach and gives the correct simplified result right away. However the point that one should apply `solve` directly to the equation with numeric coefficients is still valid.

Page 480 *Comment:*
There is a misprint on line 5. The symbol `t5` should be replaced by `t6`.

Page 505 *Comment:*
Both *Maple* 9 and *Maple* 8 are more powerfull and thre is no discrepency between the results of `rt2` and `sqrt`.