

which can be further reduced to

```
l dc 86400
```

Table 14.1 lists some other rules for a peephole optimizer. The variables *x* and *y* stand for any field or local variable. For the operations *aload* and *astore*, you may perform the same operations on the corresponding *float* and *int* instructions.

**TABLE 14.1:** *Peephole optimization rules*

Replace	With	Reason
<code>dup</code> <code>swap</code>	<code>dup</code>	The result of a <code>dup</code> is two of the same element; swapping produces an identical result.
<code>swap</code> <code>swap</code>		A double swap accomplishes nothing.
<code>inc 1 1</code> <code>inc 1 1</code>	<code>inc 1 2</code>	Since it takes just as long to increment by 2 as to increment by 1 (on most systems), you might as well do the increment just once.
<code>nop</code>		A <code>nop</code> instruction has no effect, so you might as well eliminate it.
<code>getfield x</code> <code>getfield x</code>	<code>getfield x</code> <code>dup</code>	Two <code>getfield</code> instructions one immediately after the other leave no opportunity for the field value to change, so you can replace the second one with a <code>dup</code> . <i>Exception:</i> If the field is marked <code>volatile</code> , then its value may be changed by some other thread, and this optimization would be in error.
<code>aload x</code> <code>aload x</code>	<code>aload x</code> <code>dup</code>	Some systems have special fast operations for duplicating the top element of the stack.
<code>astore x</code> <code>aload x</code>	<code>dup</code> <code>astore x</code>	Some systems have special fast operations for duplicating the top element of the stack.
<code>aload x</code> <code>astore x</code>		These instructions cancel each other out.
<code>astore x</code> <code>astore x</code>	<code>astore x</code> <code>pop</code>	Storing into the same variable twice is unnecessary; only the second store needs to be performed.
<code>aload x</code> <code>pop</code>		These instructions cancel each other out.
<code>aload x</code> <code>aload y</code> <code>areturn</code>	<code>aload y</code> <code>areturn</code>	Since the value of <i>x</i> is left on the top of the stack at the time of the return, there is no reason to push it. This optimization applies to any instruction except a method invocation, branch instruction, or storing into a field.