**Section 4.5**

**Activity 1**

Look at the following code. What does it do?

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**Activity 2**

Let

A = {*a*, *b*, *c*}

B = {1, 2, 3}

*d* is defined as {(*a,b*), (*b,c*), (*c,a*)}

*e* is defined as {(*a,*3), (*b,*2), (*c,*1)}

1. Draw an arrow diagram for each of these functions.
2. What is *e* ◦ *d*
3. What is *d* ◦ *e*

**Activity 3**

Let

* *f*: **R**→**R** and *g*: **R**→**R**
* *f*(*x*) = 2*x* + 3 g(*x*) = 3*x* + 2

1. What is *f* ◦ *g* (*2*)
2. *f* ◦ *g* (*-3*)
3. *f* ◦ *g* (*x*)?
4. g◦f (*x*)?