

```
dot<<<blocksPerGrid,threadsPerBlock>>>( dev_a, dev_b,
                                              dev_partial_c );

// copy the array 'c' back from the GPU to the CPU
HANDLE_ERROR( cudaMemcpy( partial_c, dev_partial_c,
                         blocksPerGrid*sizeof(float),
                         cudaMemcpyDeviceToHost ) );

// finish up on the CPU side
c = 0;
for (int i=0; i<blocksPerGrid; i++) {
    c += partial_c[i];
}

#define sum_squares(x)  (x*(x+1)*(2*x+1)/6)
```