

```
w, x = t.placeholder((8, 8)), t.placeholder((8, 8))
k = t.reduce_axis((0, 8))
y = t.compute((8, 8), lambda i, j:
              t.sum(w[i, k] * x[j, k], axis=k))
```

declare behavior

```
def gemm_intrinsic_lower(inputs, outputs):
    ww_ptr = inputs[0].access_ptr("r")
    xx_ptr = inputs[1].access_ptr("r")
    zz_ptr = outputs[0].access_ptr("w")
    compute = t.hardware_intrinsic("gemm8x8", ww_ptr, xx_ptr, zz_ptr)
    reset = t.hardware_intrinsic("fill_zero", zz_ptr)
    update = t.hardware_intrinsic("fuse_gemm8x8_add", ww_ptr, xx_ptr, zz_ptr)
    return compute, reset, update
```

lowering rule to generate
hardware intrinsics to carry
out the computation

```
gemm8x8 = t.decl_tensor_intrinsic(y.op, gemm_intrinsic_lower)
```