

Closing Tue, Jan. 12: 12.1, 12.2, 12.3

Closing Thu, Jan. 14: 12.4(1), 12.4(2)

Read weekly email and newsletter.

Read through 12.5 by Monday

### 12.3 Dot Products

If  $\mathbf{a} = \langle a_1, a_2, a_3 \rangle$  and  $\mathbf{b} = \langle b_1, b_2, b_3 \rangle$

$$\mathbf{a} \cdot \mathbf{b} = a_1b_1 + a_2b_2 + a_3b_3$$

Today, we will discuss this operation and related facts.