

Vector 2.1.1.1 - 2.1.1.2 - 2.1.1.3

$\langle \mathbf{a}, \mathbf{b} \rangle = \mathbf{a} \cdot \mathbf{b} = |\mathbf{a}| |\mathbf{b}| \cos \theta$
if $\mathbf{a} = (a_1, a_2, a_3)$ and $\mathbf{b} = (b_1, b_2, b_3)$
then $\mathbf{a} \cdot \mathbf{b} = a_1 b_1 + a_2 b_2 + a_3 b_3$

if $\mathbf{a} = (a_1, a_2, a_3)$ and $\mathbf{b} = (b_1, b_2, b_3)$
then $|\mathbf{a}| = \sqrt{a_1^2 + a_2^2 + a_3^2}$
and $|\mathbf{b}| = \sqrt{b_1^2 + b_2^2 + b_3^2}$
if $\mathbf{a} = (a_1, a_2, a_3)$ and $\mathbf{b} = (b_1, b_2, b_3)$
then $\mathbf{a} \cdot \mathbf{b} = |\mathbf{a}| |\mathbf{b}| \cos \theta$
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```
#include <stdio.h>
```

```
float calcula (int t, float d);
```

```
int main() {
```

```
    int t;
```

```
    float d;
```

```
    printf("Digite a distancia: "); scanf("%f", &d);
```

```
    printf("Digite o tempo: "); scanf("%f", &t);
```

```
    printf("A velocidade média é %f", calcula(t, d));
```

```
    return 0;
```

```
}
```

```
float calcula (int t, float d)
```

```
    float v;
```

```
    v = d / (float)t;
```

```
    return v;
```