

P1:1; P2:x; P3:2·x; P4:x·x;

$$\begin{array}{l} 1 \\ x \\ 2x \\ x^2 \end{array}$$

sqrt('integrate((((P1-P2)^2),x,-1,1))=sqrt(integrate((((P1-P2)^2),x,-1,1));

$$\sqrt{\int_{-1}^1 (1-x)^2 dx} = \frac{2^{3/2}}{\sqrt{3}}$$

sqrt('integrate((((P1-P2)^2),x,0,1))=sqrt(integrate((((P1-P2)^2),x,0,1));

$$\sqrt{\int_0^1 (1-x)^2 dx} = \frac{1}{\sqrt{3}}$$

'integrate((P1·P2),x,-1,1)/(sqrt('integrate((P1·P1),x,-1,1))·sqrt('integrate((P2·P2),x,-1,1)));

$$\frac{\int_{-1}^1 x dx}{\sqrt{2} \sqrt{\int_{-1}^1 x^2 dx}}$$

ev(%,integrate);

0

acos(%,numer;

1.570796326794897

'integrate((P1·P2),x,0,1)/(sqrt('integrate((P1·P1),x,0,1))·sqrt('integrate((P2·P2),x,0,1)));

$$\frac{\int_0^1 x dx}{\sqrt{\int_0^1 x^2 dx}}$$

ev(%,integrate);

$$\frac{\sqrt{3}}{2}$$

acos(%,numer;

0.5235987755982989

sqrt('integrate((((P3-P4)^2),x,-1,1))=sqrt(integrate((((P3-P4)^2),x,-1,1));

$$\sqrt{\int_{-1}^1 (2x-x^2)^2 dx} = \frac{\sqrt{46}}{\sqrt{15}}$$

sqrt('integrate((((P3-P4)^2),x,0,1))=sqrt(integrate((((P3-P4)^2),x,0,1));

$$\sqrt{\int_0^1 (2x-x^2)^2 dx} = \frac{2^{3/2}}{\sqrt{15}}$$

```
'integrate((P3·P4),x,-1,1)/(sqrt('integrate((P3·P3),x,-1,1))·sqrt('integrate((P4·P4),x,-1,1)))
```

$$\frac{\int_{-1}^1 x^3 dx}{\sqrt{\int_{-1}^1 x^2 dx} \sqrt{\int_{-1}^1 x^4 dx}}$$

```
ev(%,integrate);
```

$$0$$

```
acos(%,numer;
```

$$1.570796326794897$$

```
'integrate((P3·P4),x,0,1)/(sqrt('integrate((P3·P3),x,0,1))·sqrt('integrate((P4·P4),x,0,1)))
```

$$\frac{\int_0^1 x^3 dx}{\sqrt{\int_0^1 x^2 dx} \sqrt{\int_0^1 x^4 dx}}$$

```
ev(%,integrate);
```

$$\frac{\sqrt{3} \sqrt{5}}{4}$$

```
acos(%,numer;
```

$$0.2526802551420785$$