$$ln[24]:=$$
 b1 = List[(1/ λ) {0, 2/Sqrt[3]}]

b2 = List[
$$(1/\lambda)$$
 {1, -1/Sqrt[3]}];

b3 = List
$$[(1/\lambda) \{1, 1/Sqrt[3]\}];$$

$$c = List[\lambda \{x, y\}];$$

$$u = List[{Cos[\theta], Sin[\theta]}]$$

$$\delta 1 = b1.Transpose[c]$$

$$\delta$$
2 = b2.Transpose[c];

$$\delta$$
3 = b3.Transpose[c];

Out[24]=
$$\left\{ \left\{ 0, \frac{2}{\sqrt{3} \lambda} \right\} \right\}$$

Out[28]=
$$\{\{\cos[\theta], \sin[\theta]\}\}$$

Out[29]=
$$\left\{ \left\{ \frac{2 \sin[\theta]}{\sqrt{3}} \right\} \right\}$$

Out[32]=
$$\left\{ \left\{ \frac{2 y}{\sqrt{3}} \right\} \right\}$$

In[35]:=

 $r = Cos[2\pi * f1 * t + 2\pi * \delta1] + Cos[2\pi * f2 * t + 2\pi * \delta2] + Cos[2\pi * f3 * t + 2\pi * \delta3] \\ Integrate[r, \{x, 0, 1\}, \{y, 0, \sqrt{3}\}]$

$$\begin{aligned} & \text{Out} \text{(35)=} & \Big\{ \Big\{ \text{Cos} \Big[\frac{4 \, \pi \, y}{\sqrt{3}} + \frac{4 \, \pi \, \text{t} \, \text{Sin} [\theta]}{\sqrt{3} \, \lambda} \Big] + \text{Cos} \Big[2 \, \pi \left(x - \frac{y}{\sqrt{3}} \right) + 2 \, \pi \, \text{t} \, \left(\frac{\text{Cos} [\theta]}{\lambda} - \frac{\text{Sin} [\theta]}{\sqrt{3} \, \lambda} \right) \Big] + \text{Cos} \Big[2 \, \pi \left(x + \frac{y}{\sqrt{3}} \right) + 2 \, \pi \, \text{t} \, \left(\frac{\text{Cos} [\theta]}{\lambda} + \frac{\text{Sin} [\theta]}{\sqrt{3} \, \lambda} \right) \Big] \Big\} \Big\} \end{aligned}$$

Out[36]= $\{\{0\}\}$