

By Ali Reza Khoddami

```
1. \[
  \fbox{
    \int_{\frac{\pi}{4}}^{\frac{\pi}{3}} \frac{\sin x}{1+\cos x} dx
    = -\ln(1+\cos x)_{\frac{\pi}{4}}^{\frac{\pi}{3}}
  }
\]
```

$$\int_{\frac{\pi}{4}}^{\frac{\pi}{3}} \frac{\sin x}{1+\cos x} dx = -\ln(1 + \cos x) \Big|_{\frac{\pi}{4}}^{\frac{\pi}{3}}$$

```
2. \[
  \fbox {
    \int_{\frac{\pi}{4}}^{\frac{\pi}{3}} \frac{\sin x}{1+\cos x} dx
    = -\ln(1+\cos x) \big|_{\frac{\pi}{4}}^{\frac{\pi}{3}}
  }
\]
```

$$\int_{\frac{\pi}{4}}^{\frac{\pi}{3}} \frac{\sin x}{1+\cos x} dx = -\ln(1 + \cos x) \Big|_{\frac{\pi}{4}}^{\frac{\pi}{3}}$$

```
3. \[ \fbox{
  \iint\limits_S g(x, y) dA
}
\]
```

$$\iint_S g(x, y) dA$$

```
4. \[ \fbox{
  \iint_S g(x, y) dA
}
\]
```

$$\iint_S g(x, y) dA$$

```
5. \[
  \fbox{
    \iiint\limits_S f(x, y, z) dV
  }
\]
```

$$\iiint_S f(x, y, z) dV$$

```
6. \[
  \fbox{
    \iiint_S f(x, y, z) dV
  }
\]
```

$$\iiint_S f(x, y, z) dV$$

7. `\[`
`\fbox{`
`\iiint f(x, y, z) dxdydz`
`}`
`\]`

$$\iiint f(x, y, z) dxdydz$$

8. `\[`
`\fbox{`
`\idotsint f(x_1, x_2, x_3, \dots, x_n) dx_1 dx_2 dx_3 \dots dx_n`
`}`
`\]`

$$\int \dots \int f(x_1, x_2, x_3, \dots, x_n) dx_1 dx_2 dx_3 \dots dx_n$$

9. `\[`
`\fbox{`
`\idotsint \limits_S`
`f(x_1, x_2, x_3, \dots, x_n) dx_1 dx_2 dx_3 \dots dx_n`
`}`
`\]`

$$\int \dots \int_S f(x_1, x_2, x_3, \dots, x_n) dx_1 dx_2 dx_3 \dots dx_n$$

Note that,

10. `\[`
`\fbox{`
`\dots`
`}`
`\]`

...

11. `\[`
`\fbox{`
`\ldots`
`}`
`\]`

...

12. `\[`
`\fbox {`
`\int_{a}^{b}\int_{c}^{d}\int_{e}^{f} f(x, y, z)dxdydz`
`}`
`\]`

$$\int_a^b \int_c^d \int_e^f f(x, y, z) dx dy dz$$

13. `\[`
`\fbox{`
`\overrightarrow{x+y+z+t}`
`}`
`\]`

$$\overrightarrow{x + y + z + t}$$

14. `\[`
`\fbox{`
`\underrightarrow{x+y+z+t}`
`}`
`\]`

$$\underrightarrow{x + y + z + t}$$

15. `\[`
`\fbox{`
`\underleftarrow{x+y+z+t}`
`}`
`\]`

$$\underleftarrow{x + y + z + t}$$

16. `\[`
`\fbox{`
`\overleftarrow{x+y+z+t}`
`}`
`\]`

$$\overleftarrow{x + y + z + t}$$

17. `\[`
`\fbox {`
`A \xrightarrow{f} B \xrightarrow{g}`
`C \xrightarrow{h} D \xrightarrow{} E`
`}`
`\]`

$$A \xrightarrow{f} B \xrightarrow{g} C \xrightarrow{h} D \rightarrow E$$

18. `\[`
`\fbox {`
`A \xrightarrow[\hspace{25pt}]{f}`
`B \xrightarrow{g} C`
`\xrightarrow [\hspace{10pt}]{h}`
`D \xrightarrow[\hspace{30pt}]{}` E
`}`
`\]`

$$\boxed{A \xrightarrow{f} B \xrightarrow{g} C \xrightarrow{h} D \longrightarrow E}$$

19. `\[`
`{n \choose m}=\frac{n!}{m!(n-m)!}`
`\]`

$$\binom{n}{m} = \frac{n!}{m!(n-m)!}$$

20. `\[\underbrace{a+b+c+\dots+z}_{26} \]`

$$\underbrace{a + b + c + \dots + z}_{26}$$

21. `\[\overbrace{a+b+c+\dots+z}_{26} \]`

$$\overbrace{a + b + c + \dots + z}^{26}$$

22. `\overbrace{\underbrace{x+x+x+\dots+x}_{35}+\overbrace{y+y+\dots+y}^{50}}^{100}`

$$\overbrace{\underbrace{x + x + x + \dots + x}_{35} + \overbrace{y + y + \dots + y}^{65}}^{100}$$

Be Successful
Ali Reza Khoddami