Typeset these equations:

$$a^2 = b^2 + c^2$$

$$F = G_N \frac{m_1 m_2}{r^2}$$

$$n_\pm(E,T) = \frac{1}{e^{\frac{E}{k_B T}} \pm 1} = \frac{1}{e^{\hbar\omega/k_B T} \pm 1}$$

$$F_{\mu\nu} = [D_\mu, D_\nu] = \partial_\mu A_\nu - \partial_\nu A_\mu = \partial_{[\mu} A_{\nu]}$$

Solutions:

```
\[
a^2=b^2+c^2
\]
\[
F = G_N\frac{m_1m_2}{r^2}
\]
\[
n_{\pm}(E,T)=\frac1{e^{\frac{E}{k_BT}}\pm1}
           =\frac1{e^{{\hbar\omega}/{k_BT}}\pm1}
\]
\[
F_{\mu\nu}  =  [D_\mu  ,   D_\nu]
   =\partial_\mu A_\nu-\partial_\nu A_\mu
 =\partial_{[\mu} A_{\nu]}
\]
```

Typset: "Taylor expansion $e^x = \sum_{n=0}^{\infty} \frac{1}{n!} x^n$."

$$\int_0^1 \frac{df}{dx} dx = f(1) - f(0)$$

$$e^{\zeta(s)} = \prod_{n=1}^{\infty} e^{1/n^s}$$

(This uses the greek letter zeta)

Solutions:

```
‘‘Taylor expansion $e^x=\sum_{n=0}^\infty \frac1{n!}x^n$.’’

\[\int_{0}^1 \frac{df}{dx}dx= f(1)-f(0)\]

\[e^{\zeta(s)}=\prod_{n=1}^\infty e^{1/n^s}\]
```