

81 $udd \Rightarrow up, down, down$

82 -1 e

83 1.6×10^{-7} J

down - $-\frac{1}{3}$

STRANGE - $-\frac{1}{3}$

Bottom - $-\frac{1}{3}$

$-\frac{1}{3}$

-1

84-85

1 TeV

$$= 1 \times 10^{12} \text{ eV} \times \frac{1.6 \times 10^{-19} \text{ J}}{1 \text{ eV}}$$

$$= 1.6 \times 10^{-7} \text{ J}$$