

The expectation value for the observable associated with the operator  $\hat{A}$  is given by  $\int \psi^* \hat{A} \psi \, d\tau$ . When the wavefunction describing a system is an eigenfunction of the operator  $\hat{A}$ , this definition of expectation value is given by

a.  $a$ , the eigenvalue

b.  $\int \psi^* \psi \, d\tau$

c.  $\hat{A}$ , the operator

d.  $a^2$ , the square of the eigenvalue