

Enrichment 4-1

Brain Teaser

Find a quote by Albert Einstein. Use the matrix of letters to fill in the blanks with the corresponding matrix element.

$$\overline{a_{48}} \quad \overline{a_{32}} \quad \overline{a_{18}} \quad \overline{a_{19}} \quad \overline{a_{25}} \quad \overline{a_{22}} \quad \overline{a_{11}} \quad \overline{a_{25}} \quad \overline{a_{14}} \quad \overline{a_{32}} \quad \overline{a_{18}} \quad \overline{a_{19}} \quad \overline{a_{25}} \quad \overline{a_{22}} \quad \overline{a_{16}} \quad \overline{a_{26}} \quad \overline{a_{29}}$$

$$\overline{a_{24}} \quad \overline{a_{26}} \quad \overline{a_{25}} \quad \overline{a_{32}} \quad \overline{a_{18}} \quad \overline{a_{31}} \quad \overline{a_{11}} \quad \overline{a_{25}} \quad \overline{a_{14}} \quad \overline{a_{37}} \quad \overline{a_{15}} \quad \overline{a_{11}} \quad \overline{a_{29}} \quad \overline{a_{31}} \cdot$$

$$\overline{a_{54}} \quad \overline{a_{19}} \quad \overline{a_{25}} \quad \overline{a_{15}} \quad \overline{a_{32}} \quad \overline{a_{37}} \quad - \quad \overline{a_{25}} \quad \overline{a_{19}} \quad \overline{a_{25}} \quad \overline{a_{15}} \quad \overline{a_{32}} \quad \overline{a_{19}} \quad \overline{a_{24}} \quad \overline{a_{15}} \quad \overline{a_{31}} \quad , \quad \overline{a_{32}} \quad \overline{a_{18}} \quad \overline{a_{15}}$$

$$\overline{a_{13}} \quad \overline{a_{26}} \quad \overline{a_{25}} \quad \overline{a_{13}} \quad \overline{a_{23}} \quad \overline{a_{33}} \quad \overline{a_{31}} \quad \overline{a_{19}} \quad \overline{a_{26}} \quad \overline{a_{25}} \quad \overline{a_{19}} \quad \overline{a_{31}} \quad \overline{a_{16}} \quad \overline{a_{11}} \quad \overline{a_{23}} \quad \overline{a_{31}} \quad \overline{a_{15}} \cdot$$

$$\overline{a_{61}} \quad \overline{a_{18}} \quad \overline{a_{15}} \quad \overline{a_{18}} \quad \overline{a_{33}} \quad \overline{a_{25}} \quad \overline{a_{14}} \quad \overline{a_{29}} \quad \overline{a_{15}} \quad \overline{a_{14}} \quad \overline{a_{32}} \quad \overline{a_{18}} \quad \overline{a_{32}} \quad \overline{a_{19}} \quad \overline{a_{24}} \quad \overline{a_{15}} \quad \overline{a_{48}}$$

$$\overline{a_{11}} \quad \overline{a_{24}} \quad \overline{a_{29}} \quad \overline{a_{19}} \quad \overline{a_{17}} \quad \overline{a_{18}} \quad \overline{a_{32}} \cdot$$

— Albert Einstein

$$A = \begin{bmatrix} a & b & c & d & e & f & g & h & i \\ j & k & l & m & n & o & p & q & r \\ s & t & u & v & w & x & y & z & A \\ B & C & D & E & F & G & H & I & J \\ K & L & M & N & O & P & Q & R & S \\ T & U & V & W & X & Y & Z & ! & ? \end{bmatrix}$$