

■ CHAPTER 8 ■

|                |                 |                 |   |                |   |                |                 |   |                 |   |   |   |                |   |   |   |   |  |                |
|----------------|-----------------|-----------------|---|----------------|---|----------------|-----------------|---|-----------------|---|---|---|----------------|---|---|---|---|--|----------------|
| <sup>1</sup> K |                 |                 |   |                |   |                |                 |   |                 |   |   |   |                |   |   |   |   |  |                |
| A              |                 |                 |   |                |   |                |                 |   |                 |   |   |   |                |   |   |   |   |  |                |
| R              |                 |                 |   |                |   |                |                 |   |                 |   |   |   |                |   |   |   |   |  |                |
| A              |                 |                 |   |                |   |                |                 |   |                 |   |   |   |                |   |   |   |   |  |                |
| T              |                 |                 |   |                |   | <sup>2</sup> M |                 |   |                 |   |   |   |                |   |   |   |   |  |                |
| <sup>3</sup> S | T               | R               | A | S              | S | E              | N               |   |                 |   |   |   |                |   |   |   |   |  |                |
| U              |                 |                 |   |                |   | R              |                 |   |                 |   |   |   |                |   |   |   |   |  |                |
| B              |                 |                 |   | <sup>4</sup> H |   | G              |                 |   |                 |   |   |   |                |   |   |   |   |  |                |
| A              |                 |                 |   | <sup>5</sup> O | N | E              |                 |   |                 |   |   |   | <sup>6</sup> U |   |   |   |   |  |                |
|                |                 |                 |   | A              |   |                | <sup>7</sup> T  |   | <sup>8</sup> T  |   |   |   | N              |   |   |   |   |  | <sup>9</sup> C |
|                | <sup>10</sup> F | O               | U | R              | I | E              | R               |   | O               |   |   |   | I              |   |   |   |   |  | L              |
|                |                 |                 |   | E              |   |                | O               |   | <sup>11</sup> P | E | N | T | A              | M | I | N | O |  |                |
|                |                 |                 |   |                |   |                | M               |   | D               |   |   | Y |                |   |   |   |   |  | S              |
|                |                 |                 |   |                |   |                | <sup>12</sup> P | I | V               | O | T |   |                |   |   |   |   |  | E              |
|                |                 |                 |   |                |   |                | N               |   | W               |   |   |   |                |   |   |   |   |  | S              |
|                |                 | <sup>13</sup> L | O | M              | U | T              | O               |   | <sup>14</sup> N | E | U | M | A              | N | N |   |   |  | T              |

**Across**

- The faster matrix multiplication algorithm was developed by \_\_\_\_\_ [STRASSEN]
- Nico Lomuto partition is a \_\_\_\_\_ direction partition [ONE]
- The method of representing a polynomial at the Nth root of unity is \_\_\_\_\_ transform [FOURIER]
- A tile with five  $1 \times 1$  squares is called a \_\_\_\_\_ [PENTAMINO]
- The element that is used to partition an array is called the \_\_\_\_\_ [PIVOT]
- Two partition algorithms are Hoare partition and \_\_\_\_\_ partition [LOMUTO]
- Merge sort was designed by John Von \_\_\_\_\_ [NEUMANN]

**Down**

- The longer integer multiplication algorithm was designed by \_\_\_\_\_ [KARATSUBA]
- A \_\_\_\_\_ hull algorithm uses a lower and an upper tangent to construct a convex hull [MERGE]
- Quick sort was designed by \_\_\_\_\_ [HOARE]
- The Nth root solution of  $x^n - 1$  is called the Nth root of \_\_\_\_\_ [UNITY]
- An L-shaped tile with three  $1 \times 1$  squares is called a \_\_\_\_\_ [TROMINO]
- Divide and conquer follows a \_\_\_\_\_ approach [TOPDOWN]
- Points separated by the least distance is called the \_\_\_\_\_ pair [CLOSEST]