

**INVESTIGATION ANSWERS**

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**Pattern Recognition:**

- 1** 67, 73, 79, arithmetic
- 2** 32, 64, 128, geometric
- 3** 42, 40, 38, arithmetic
- 4** 162, 486, 1458, geometric
- 5** \$63; \$71; \$79; arithmetic
- 6** 100; 200; 400; geometric
- 7** 5, 9, 4
- 8** 3, 6, 5
- 9** B, U, L
- 10** U, L, B
- 11** 4, 4, 5, 5; a sequence of the counting numbers that increases by 1 and with each number recorded twice
- 12** 8, 0, 10, 0; The terms alternate between 0s and the positive even numbers. The positive even numbers increase by 2.
- 13** J, K, M, N; the letters of the alphabet, skipping every third letter
- 14**  $\neg$ ,  $\perp$ ,  $\vdash$ , the uppercase letter T, starting upright and rotating  $90^\circ$  clockwise for each term of the sequence
- 15** 1, 2, 3, 4, 5; These are the counting numbers 1, 2; followed by 1, 2, 3; followed by 1, 2, 3, 4; and so on.
- 16** 36, 49, 64
- 17** 17, 23, 30
- 18** 13, 21, 34; 32 quarts
- 19** C
- 20** 11
- 21** Multiply the hours worked by 8 dollars.
- 22** \$200
- 23** 1095 miles in a year; 9, 15, 24

