

Answer Key

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|-----------------|-----------------|-----------------|-----------------|
| 1. C | 21. B, C | 41. C | 61. B |
| 2. C | 22. B | 42. B | 62. A |
| 3. B | 23. D | 43. A | 63. C |
| 4. D | 24. A, C | 44. B | 64. D |
| 5. B | 25. A | 45. D | 65. C |
| 6. C | 26. D | 46. D | 66. B |
| 7. B | 27. B, C | 47. B | 67. B |
| 8. A | 28. A | 48. A | 68. A, B |
| 9. A | 29. B | 49. D | 69. A |
| 10. A | 30. C | 50. B | 70. D |
| 11. D | 31. A | 51. C | 71. A |
| 12. A, D | 32. C | 52. D | 72. D |
| 13. C | 33. D | 53. D | 73. B, D |
| 14. B | 34. B | 54. D | 74. B |
| 15. C | 35. D | 55. D | 75. A |
| 16. C | 36. B | 56. A | 76. A |
| 17. C | 37. D | 57. A | 77. B |
| 18. A | 38. A | 58. D | 78. D |
| 19. B | 39. B | 59. B, C | |
| 20. B, D | 40. B | 60. A | |

Answers Explained

- (C)** “Iterative” refers to a repeated process, which is how computer code is processed. Each piece of data is put through a process, which is repeated for every piece.
 (A) would require multiple lines of code to be evaluated at once. To calculate line 3 correctly, lines 1 and 2 would have needed to be evaluated first.
 (B) is dependent on the program in question (most don’t even require metadata).
 (D) is the value of $a + b$ without changing the value of a .
- (C)** Searching for patterns in big data can be used in careers other than strictly computer science such as Marine Biology. Tracking whales is one such example. Because the data are tracking multiple whales, it would be possible to know if a particular whale was traveling with other whales, the typical travel patterns, and how many miles the animal travels weekly. (A), (B), and (D) can be determined using strictly the data. Although (C) can be determined by matching up the whale data with weather data, it would require the addition of another data set. Since the question was what can be determined by just using the one data set, the answer is (C). That was a whale of a question.
- (B)** Companies use computer programs to process information to gain insight and knowledge. Large data sets provide opportunities and challenges for extracting information and knowledge. Past purchases can be used to suggest future purchases. For example, if a dog leash is purchased from Amazon, the next time the customer visits Amazon, the site might suggest dog food. Choices (A), (C), and (D) do not make predictions but, instead, make calculations based on the actual data.