

Answers, explanations and assessments

Chapter 3 – Logical reasoning

Answers

- 1 tortoise: the name of each creature commences with the letter that come two letters in the alphabet after the last letter of the previous creature. Also the name of each creature contains one more letter than the previous creature.
- 2 October: jump an extra month each time, i.e. January February (March) April (May June) July (August September October) November (December January February March) April (May June July August September) October.

- 3 D I
S N

Starting letters for each square, commencing at the top left-hand corner, are ABCD. Each square jumps an extra letter, rotating clockwise. AbCdEfG, BcdEfgHijK, CdefGhijKlmnO, DefghIjklmNopqrS.

- 4 583796: the bottom three rows are the reverse of the top three rows of numbers.
- 5 10 and 6: opposite pairs of numbers in the first circle total 11, in the second circle they total 12, and in the third circle 13.
- 6 9
4
7
5

The numbers reading down the middle are the sum of the top and bottom numbers in another figure; $5821 + 3654 = 9475$.

7 2681749: reverse the first three numbers, then reverse the last four numbers.

8 3859 1114 25

4978 1315 46

7579 1216 37

$3 + 8 = 11, 5 + 9 = 14$

$1 + 1 = 2, 1 + 4 = 5$

9 16: $(33 + 31) \div 4 = 16$

10 76: reverse the first number but discard the highest and lowest digits.

Assessment

4-5 Average

6-7 Good

8 Very good

9-10 Exceptional