



EP.V70 Verbal Reasoning: Codes Set 5

GL ASSESSMENT EP.V70 · Calculators not allowed · about 24 minutes

Total Marks

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Name: _____ Date: ____ / ____ / ____

This is a 24-minute Verbal Reasoning depth practice on letter and number codes (Set 5), styled on GL Assessment 11+ multiple-choice papers. It is a fifth, all-new set of codes-style questions on this topic. There are 32 questions across four sections: Letter Codes, Number Codes, Grid Codes and Substitution and Mixed Codes. Every question is worth 1 mark, for 32 marks in total. Difficulty increases through each section and across the pack as a whole, finishing with scholarship-level stretch questions. For each question, choose the ONE best answer from the options A to E. No calculator is allowed. Read every rule or example carefully, since a different rule may apply in each question, and check whether letters or digits shift forward or backward, whether the alphabet wraps around, whether a grid uses row-then-column or column-then-row order, and whether a code table needs to be built from more than one example before you can use it.

Worked example. Worked example (Letter Codes): if PLUM is coded as SOXP, what is the code for DESK? **Answer: GHVN.** Comparing PLUM and SOXP shows every letter moves forward 3 places in the alphabet (P to S, L to O, U to X, M to P). Applying the same forward shift of 3 to DESK gives D to G, E to H, S to V, K to N, i.e. GHVN. Apply this same careful, letter-by-letter approach throughout the pack, even as the sections move from letter codes to number codes, grid codes and substitution ciphers, always reading the rule or example given in each question closely, since it can change from question to question, including whether letters or digits shift forward or backward, whether the alphabet wraps around, whether a grid uses row-then-column or column-then-row order, and whether a code table needs to be built from more than one example before it can be applied to a new word.

1 SECTION 1: LETTER CODES (6 minutes, 8 questions)

Study the rule or example given in each question to work out how the letters are coded, then apply the same rule to a new word. A different rule may apply in each question, including how far the letters shift, whether the alphabet wraps around, and whether the word is reversed.

Q1. In a code, each letter is replaced by the letter 4 places later in the alphabet, wrapping back to A after Z. What is the code for FOX?

- ☐ A) JSB
- ☐ B) FSB
- ☐ C) JOB
- ☐ D) JSX
- ☐ E) IRA

(Total for Question 1 is 1 mark)

2 (Letter Codes) Q2. In a code, each letter is replaced by the letter 5 places later in the alphabet, wrapping back to A after Z. A word has been coded as FUUQJ. What was the original word?

- ☐ A) APPLE
- ☐ B) FPPLLE
- ☐ C) AUPLE
- ☐ D) APPQE
- ☐ E) APPLJ

(Total for Question 2 is 1 mark)

3 (Letter Codes) Q3. In a code, GARDEN is written as KEVHIR. Using the same code, what is TABLE written as?

- ☐ A) XEFPI
- ☐ B) TEFPI
- ☐ C) XAFPI
- ☐ D) XEBPI
- ☐ E) XEFLI

(Total for Question 3 is 1 mark)

4 (Letter Codes) Q4. In a code, PLANET is written as JFUHYN. Using the same code, what word does ILUHAY represent?

- ☐ A) ORANGE
- ☐ B) IRANGE
- ☐ C) OLANGE
- ☐ D) ORAHGE
- ☐ E) ORANGY

(Total for Question 4 is 1 mark)

5 (Letter Codes) Q5. In a code, each letter is replaced by the letter the same distance from the end of the alphabet as it is from the start (so A becomes Z, B becomes Y, and so on). What is the code for STORM?

- ☐ A) HGLIN
- ☐ B) SGLIN
- ☐ C) HTLIN
- ☐ D) HGOIN
- ☐ E) HGLRN

(Total for Question 5 is 1 mark)

6 (Letter Codes) Q6. In a code, each letter moves 3 places later in the alphabet, and then the letters of the whole word are written in reverse order. What is the code for MANGO?

- ☐ A) RJQDP
- ☐ B) PDQJR
- ☐ C) RQJDP
- ☐ D) JRQDP
- ☐ E) RJQPD

(Total for Question 6 is 1 mark)

7 (Letter Codes) Q7. In a code, the first letter of a word moves 1 place later in the alphabet, the second letter moves 2 places later, the third letter moves 3 places later, and so on (each letter moving one more place later than the letter before it). A word has been coded as FXHRY. What was the original word?

- ☐ A) EVENT
- ☐ B) FVENT
- ☐ C) EXENT
- ☐ D) EVHNT
- ☐ E) EVERT

(Total for Question 7 is 1 mark)

8 (Letter Codes) Q8. Using the same code as Q6 (each letter moves 3 places later in the alphabet, then the whole word is reversed), what word was coded as UHJLW?

- ☐ A) TIGER
- ☐ B) REGIT
- ☐ C) ITGER
- ☐ D) TIGRE
- ☐ E) TIGEU

(Total for Question 8 is 1 mark)

9 SECTION 2: NUMBER CODES (6 minutes, 8 questions)

In this section, letters and numbers are linked using their position in the alphabet. Unless a question says otherwise, use A=1, B=2, C=3, up to Z=26.

Q1. Using A=1, B=2, C=3, up to Z=26, what number represents the letter R?

- ☐ A) 18
- ☐ B) 17
- ☐ C) 19
- ☐ D) 9
- ☐ E) 22

(Total for Question 9 is 1 mark)

10 (Number Codes) Q2. Using the same rule (A=1 to Z=26), what letter is represented by the number 7?

- ☐ A) G
- ☐ B) F
- ☐ C) H
- ☐ D) D
- ☐ E) J

(Total for Question 10 is 1 mark)

11 (Number Codes) Q3. Using the same rule (A=1 to Z=26), what is the value of the word CAP (the sum of its letter values)?

- ☐ A) 20
- ☐ B) 19
- ☐ C) 21
- ☐ D) 23
- ☐ E) 17

(Total for Question 11 is 1 mark)

12 (Number Codes) Q4. Using the same rule (A=1 to Z=26), what word is represented by 4-9-19-8?

- ☐ A) DISH
- ☐ B) EISH
- ☐ C) DJSH
- ☐ D) DITH
- ☐ E) DISG

(Total for Question 12 is 1 mark)

13 (Number Codes) Q5. In a code, each letter's number is its position in the alphabet plus 7 (so A=8, B=9, C=10, and so on). What is the code for the word LAMP?

- ☐ A) 19-8-20-23
- ☐ B) 12-8-20-23
- ☐ C) 19-1-20-23
- ☐ D) 19-8-13-23
- ☐ E) 19-8-20-16

(Total for Question 13 is 1 mark)

14 (Number Codes) Q6. Using the same code (letter's number = alphabet position plus 7), what word is represented by 26-8-21-11?

- ☐ A) SAND
- ☐ B) ZAND
- ☐ C) SHND
- ☐ D) SAUD
- ☐ E) SANK

(Total for Question 14 is 1 mark)

15 (Number Codes) Q7. In a code, each letter is given the value of its position in the alphabet, then that value is doubled and 1 is added. What is the code for the letter H?

- ☐ A) 17
- ☐ B) 16
- ☐ C) 18
- ☐ D) 15
- ☐ E) 9

(Total for Question 15 is 1 mark)

16 (Number Codes) Q8. Using a reverse code where Z=1, Y=2, X=3, and so on down to A=26, what is the value of the word GATE (the sum of its letter values)?

- ☐ A) 75
- ☐ B) 74
- ☐ C) 76
- ☐ D) 33
- ☐ E) 45

(Total for Question 16 is 1 mark)

17 SECTION 3: GRID CODES (6 minutes, 8 questions)

Letters are arranged in a grid of 5 rows and 5 columns, each numbered 1 to 5. Because there are only 25 squares for 26 letters, I and J share the same square. Unless a question says otherwise, each letter is coded as its row number followed by its column number.

Row 1: A B C D E

Row 2: F G H I/J K

Row 3: L M N O P

Row 4: Q R S T U

Row 5: V W X Y Z

For example, D is in row 1, column 4, so D is coded as 14.

Q1. Using the grid above, what is the code for the word BED?

- ☐ A) 12-15-14
- ☐ B) 21-15-14
- ☐ C) 12-5-14
- ☐ D) 12-15-41
- ☐ E) 14-15-12

(Total for Question 17 is 1 mark)

18 (Grid Codes) Q2. Using the grid above, what word is represented by the code 32-34-35?

- ☐ A) MOP
- ☐ B) LOP
- ☐ C) MTP
- ☐ D) MOJ
- ☐ E) MPO

(Total for Question 18 is 1 mark)

19 (Grid Codes) Q3. Using the grid above, what is the code for the word PLANT?

- ☐ A) 35-31-11-33-44
- ☐ B) 25-31-11-33-44
- ☐ C) 35-31-21-33-44
- ☐ D) 35-13-11-33-44
- ☐ E) 35-31-11-33-34

(Total for Question 19 is 1 mark)

20 (Grid Codes) Q4. Using the grid above, what word is represented by the code 42-45-43-44?

- ☐ A) RUST
- ☐ B) MUST
- ☐ C) RPST
- ☐ D) RUNT
- ☐ E) RUSO

(Total for Question 20 is 1 mark)

21 (Grid Codes) Q5. Using the grid above, what is the code for the word MAIL?

- ☐ A) 32-11-24-31
- ☐ B) 23-11-24-31
- ☐ C) 32-11-24-13
- ☐ D) 32-21-24-31
- ☐ E) 31-24-11-32

(Total for Question 21 is 1 mark)

22 (Grid Codes) Q6. Using the grid above (remember I and J share the same square), what word is represented by the code 42-11-24-33?

- ☐ A) RAIN
- ☐ B) RAJN
- ☐ C) RAKN
- ☐ D) MAIN
- ☐ E) RAIS

(Total for Question 22 is 1 mark)

23 (Grid Codes) Q7. In a modified version of the grid code, each letter is coded as its COLUMN number followed by its ROW number (the opposite order from before). Using this modified code and the grid above, what is the code for the word BOX?

- ☐ A) 21-43-35
- ☐ B) 12-34-53
- ☐ C) 21-43-53
- ☐ D) 12-43-35
- ☐ E) 21-4-35

(Total for Question 23 is 1 mark)

24 (Grid Codes) Q8. Using the grid above (remember I and J share the same square), what word is represented by the code 24-45-24-13-15?

- ☐ A) JUICE
- ☐ B) IUJCE
- ☐ C) JTICE
- ☐ D) JUIHE
- ☐ E) JUICK

(Total for Question 24 is 1 mark)

25 SECTION 4: SUBSTITUTION AND MIXED CODES (6 minutes, 8 questions)

Each question gives a substitution rule, keyword or worked example pair. Work out exactly how each letter is replaced, then apply the same rule to the new word. A different rule may apply in each question.

Q1. In a code, the letters of the keyword BLUEPRINTS stand for the digits 0 to 9 in order, so B=0, L=1, U=2, E=3, P=4, R=5, I=6, N=7, T=8 and S=9. What number is represented by the word RUNT?

- ☐ A) 5278
- ☐ B) 5287
- ☐ C) 2578
- ☐ D) 4278
- ☐ E) 5279

(Total for Question 25 is 1 mark)

26 (Substitution and Mixed Codes) Q2. Using the same code (B=0, L=1, U=2, E=3, P=4, R=5, I=6, N=7, T=8, S=9), what word is represented by 4398?

- ☐ A) PEST
- ☐ B) LEST
- ☐ C) PUST
- ☐ D) PENT
- ☐ E) PESS

(Total for Question 26 is 1 mark)

27 (Substitution and Mixed Codes) Q3. In a code, PLUM is written as KGPH, and SAND is written as NVIY. Using the same code, what is PLAN written as?

- ☐ A) KGV I
- ☐ B) KGIV
- ☐ C) KGPI
- ☐ D) KGVY
- ☐ E) GKVI

(Total for Question 27 is 1 mark)

28 (Substitution and Mixed Codes) Q4. Using the same code as Q3 (P=K, L=G, U=P, M=H, S=N, A=V, N=I, D=Y), what word does the code NPI represent?

- ☐ A) SUN
- ☐ B) NUN
- ☐ C) SPN
- ☐ D) SUI
- ☐ E) SNU

(Total for Question 28 is 1 mark)

29 (Substitution and Mixed Codes) Q5. Using the same code as Q3 (P=K, L=G, U=P, M=H, S=N, A=V, N=I, D=Y), what is SPAM written as?

- ☐ A) NKVH
- ☐ B) NKHV
- ☐ C) KNVH
- ☐ D) NKVM
- ☐ E) SKVH

(Total for Question 29 is 1 mark)

30 (Substitution and Mixed Codes) Q6. In this code, each letter is replaced by the letter 6 places later in the alphabet, wrapping back to A after Z. Four of these five word-code pairs follow that rule correctly. Which ONE does NOT?

- ☐ A) FROG -> LXUM
- ☐ B) SWAN -> YCGT
- ☐ C) CRAB -> IXGH
- ☐ D) MOTH -> SUZN
- ☐ E) HAWK -> NGCR

(Total for Question 30 is 1 mark)

31 (Substitution and Mixed Codes) Q7. In a code, a word is first spelled backwards, then each letter is replaced using the reverse-alphabet code (A=Z, B=Y, C=X, and so on). What is the code for TIGER?

- ☐ A) IVTRG
- ☐ B) GRTVI
- ☐ C) IVTGR
- ☐ D) VITRG
- ☐ E) ITVRG

(Total for Question 31 is 1 mark)

32 (Substitution and Mixed Codes) Q8. In a code, WINTER is written as OAFLWJ, and MARCH is written as ESJUZ. Using the same code, what word does UZSAF represent?

- ☐ A) CHAIN
- ☐ B) ZUSAF
- ☐ C) CHAIJ
- ☐ D) CHAWF
- ☐ E) CHASN

(Total for Question 32 is 1 mark)

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Question 1

- **B1 A) JSB** - shifting each letter of FOX forward 4 gives F to J, O to S, X to B (wrapping past Z) cao
- **Answer: A) JSB**

Question 2

- **B1 A) APPLE** - decoding means shifting each code letter back by 5: F to A, U to P, U to P, Q to L, J to E cao
- **Answer: A) APPLE**

Question 3

- **B1 A) XEFPI** - comparing GARDEN and KEVHIR shows each letter shifts forward 4 (G to K, A to E, R to V, D to H, E to I, N to R); applying this to TABLE gives T to X, A to E, B to F, L to P, E to I, i.e. XEFPI cao
- **Answer: A) XEFPI**

Question 4

- **B1 A) ORANGE** - comparing PLANET and JFUHYN shows each letter shifts back 6 (P to J, L to F, A to U wrapping, N to H, E to Y wrapping, T to N); decoding ILUHAY means shifting forward 6: I to O, L to R, U to A (wrapping past Z), H to N, A to G, Y to E (wrapping past Z), i.e. ORANGE cao
- **Answer: A) ORANGE**

Question 5

- **B1 A) HGLIN** - applying the reverse-alphabet code to STORM gives S to H, T to G, O to L, R to I, M to N cao
- **Answer: A) HGLIN**

Question 6

- **B1 A) RJQDP** - shifting each letter of MANGO forward 3 gives PDQJR; reversing the letters of PDQJR gives RJQDP cao
- **Answer: A) RJQDP**

Question 7

- **B1 A) EVENT** - decoding means subtracting 1 from the first letter, 2 from the second, 3 from the third, 4 from the fourth and 5 from the fifth: F-1=E, X-2=V, H-3=E, R-4=N, Y-5=T, i.e. EVENT cao
- **Answer: A) EVENT**

Question 8

- **B1 A) TIGER** - reversing UHJLW gives WLJHU; shifting each letter of WLJHU back by 3 gives W to T, L to I, J to G, H to E, U to R, i.e. TIGER cao
- **Answer: A) TIGER**

Question 9

- **B1 A) 18** - counting A=1, B=2, and so on, the 18th letter of the alphabet is R cao
- **Answer: A) 18**

Question 10

- **B1 A) G** - counting A=1, B=2, and so on, the 7th letter of the alphabet is G cao
- **Answer: A) G**

Question 11

- **B1 A) 20** - C=3, A=1, P=16, so the sum is 3+1+16=20 cao
- **Answer: A) 20**

Question 12

- **B1 A) DISH** - 4=D, 9=I, 19=S, 8=H, so the code 4-9-19-8 spells DISH cao
- **Answer: A) DISH**

Question 13

- **B1 A)** 19-8-20-23 - L's position is 12, plus 7 is 19; A's position is 1, plus 7 is 8; M's position is 13, plus 7 is 20; P's position is 16, plus 7 is 23; giving 19-8-20-23 cao
- **Answer: A) 19-8-20-23**

Question 14

- **B1 A)** SAND - subtracting 7 from each number gives $26-7=19=S$, $8-7=1=A$, $21-7=14=N$, $11-7=4=D$, spelling SAND cao
- **Answer: A) SAND**

Question 15

- **B1 A)** 17 - H's position is 8, doubling gives 16, and adding 1 gives $16+1=17$ cao
- **Answer: A) 17**

Question 16

- **B1 A)** 75 - using value = 27 minus the normal alphabet position, $G=27-7=20$, $A=27-1=26$, $T=27-20=7$, $E=27-5=22$, so the sum is $20+26+7+22=75$ cao
- **Answer: A) 75**

Question 17

- **B1 A)** 12-15-14 - B is row 1, col 2 (12); E is row 1, col 5 (15); D is row 1, col 4 (14); giving 12-15-14 cao
- **Answer: A) 12-15-14**

Question 18

- **B1 A)** MOP - $32=M$, $34=O$, $35=P$, so the code 32-34-35 spells MOP cao
- **Answer: A) MOP**

Question 19

- **B1 A)** 35-31-11-33-44 - $P=35$, $L=31$, $A=11$, $N=33$, $T=44$, giving 35-31-11-33-44 cao
- **Answer: A) 35-31-11-33-44**

Question 20

- **B1 A)** RUST - $42=R$, $45=U$, $43=S$, $44=T$, so the code spells RUST cao
- **Answer: A) RUST**

Question 21

- **B1 A)** 32-11-24-31 - $M=32$, $A=11$, $I=24$ (I and J share this square), $L=31$, giving 32-11-24-31 cao
- **Answer: A) 32-11-24-31**

Question 22

- **B1 A)** RAIN - $42=R$, $11=A$, $24=I$ or J , $33=N$; reading the coordinates as R-A-I-N gives the real word RAIN cao
- **Answer: A) RAIN**

Question 23

- **B1 A)** 21-43-35 - B is row 1, col 2, so column-then-row gives 21; O is row 3, col 4, so column-then-row gives 43; X is row 5, col 3, so column-then-row gives 35; giving 21-43-35 cao
- **Answer: A) 21-43-35**

Question 24

- **B1 A)** JUICE - $24=J$ or I , $45=U$, $24=I$ or J , $13=C$, $15=E$; choosing J then I (since I then J would give the non-word IUJCE) gives the real word JUICE cao
- **Answer: A) JUICE**

Question 25

- **B1 A)** 5278 - $R=5$, $U=2$, $N=7$, $T=8$, so RUNT is represented by 5278 cao
- **Answer: A) 5278**

Question 26

- **B1 A)** PEST - 4=P, 3=E, 9=S, 8=T, so the code 4398 spells PEST cao
- **Answer: A) PEST**

Question 27

- **B1 A)** KGV I - matching letters in PLUM/KGPH and SAND/NVIY gives P=K, L=G, U=P, M=H, S=N, A=V, N=I, D=Y; applying this to PLAN gives P to K, L to G, A to V, N to I, i.e. KGV I cao
- **Answer: A) KGV I**

Question 28

- **B1 A)** SUN - reversing the table gives N=S, P=U, I=N, so the code NPI spells SUN cao
- **Answer: A) SUN**

Question 29

- **B1 A)** NKVH - using the table S=N, P=K, A=V, M=H, the word SPAM becomes N, K, V, H, i.e. NKVH cao
- **Answer: A) NKVH**

Question 30

- **B1 E)** HAWK -> NGCR is wrong - applying the rule to HAWK gives H to N, A to G, W to C (wrapping past Z), K to Q, so the correct code is NGCQ, not NGCR cao
- **Answer: E) HAWK -> NGCR is wrong (should be HAWK -> NGCQ)**

Question 31

- **B1 A)** IVTRG - reversing TIGER gives REGIT; applying the reverse-alphabet code to each letter of REGIT gives R to I, E to V, G to T, I to R, T to G, i.e. IVTRG cao
- **Answer: A) IVTRG**

Question 32

- **B1 A)** CHAIN - matching letters across WINTER/OAFLWJ and MARCH/ESJUZ gives C=U, H=Z, A=S, I=A, N=F; decoding UZSAF with the reverse table gives U to C, Z to H, S to A, A to I, F to N, i.e. CHAIN cao
- **Answer: A) CHAIN**