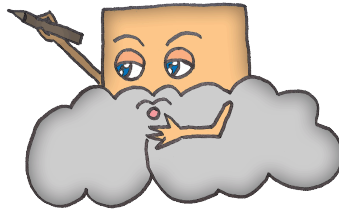
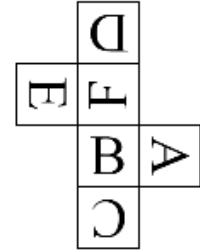
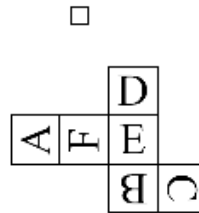
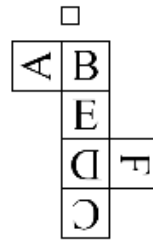
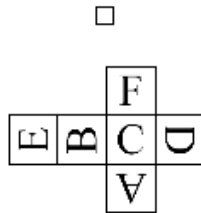
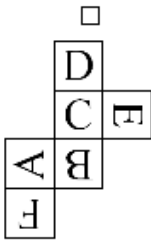


prof. Matemko



Deduce the Net for a Die

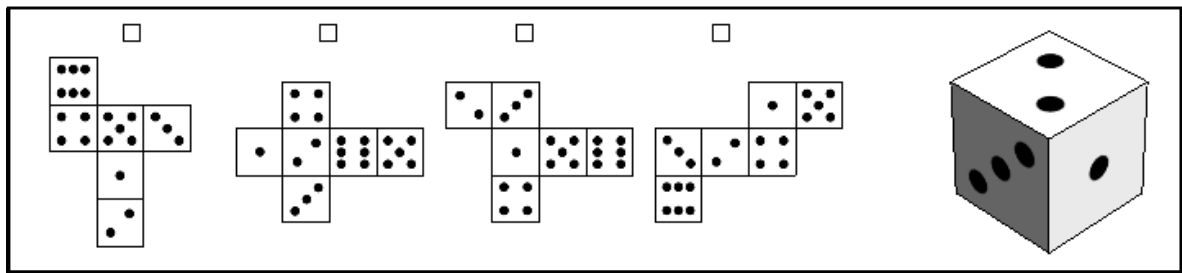
This examples asks you to find the net for a given die
The die is given by a net or solid on the left,
and you must check the correspondind net on the righth.



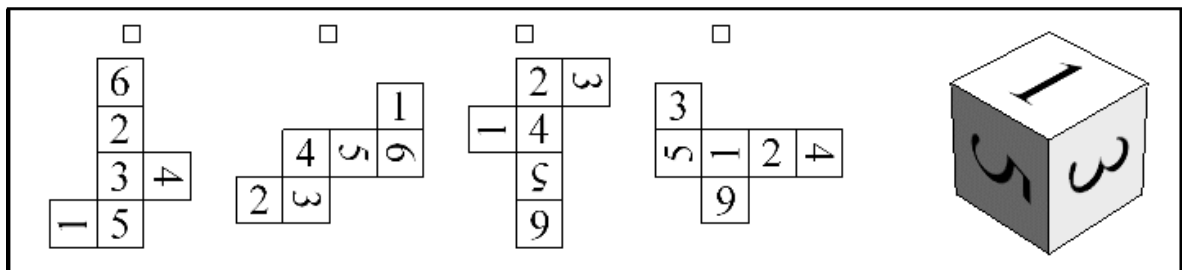
Answer: 1

MATHEMA

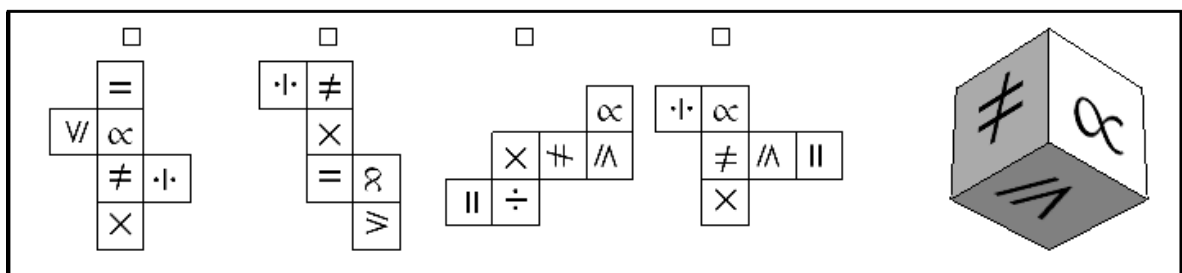
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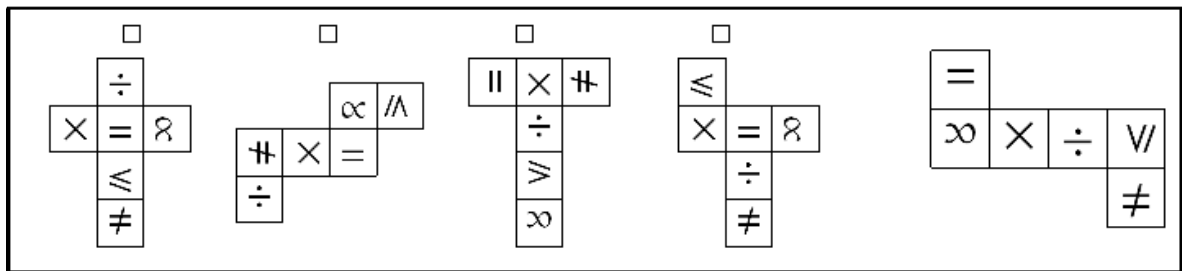
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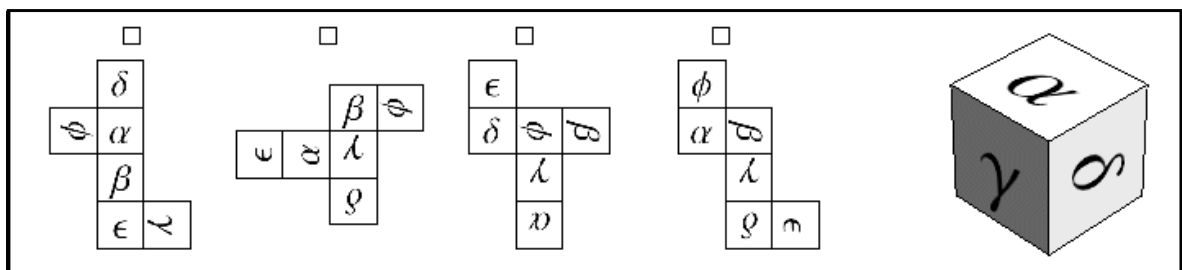
3



4



5



6

Four nets for a die with faces labeled A, B, C, D, E, F. The nets are:

- Net 1: A vertical column of B, C, D, E. A square with A is attached to the left of B. A square with F is attached to the right of C.
- Net 2: A horizontal row of F, E, C, A. A square with B is attached to the top of E. A square with D is attached to the bottom of C.
- Net 3: A horizontal row of B, E, F, C, A. A square with D is attached to the bottom of E.
- Net 4: A horizontal row of A, B, C, E, F. A square with D is attached to the bottom of B.

7

Four nets for a die with faces labeled with mathematical symbols: \forall , \neq , \times , \div , $=$, ∞ . The nets are:

- Net 1: A vertical column of \forall , \neq , \times , \div . A square with $=$ is attached to the right of \neq . A square with ∞ is attached to the right of \div .
- Net 2: A horizontal row of \div , \neq , ∞ , \parallel . A square with \leq is attached to the top of \neq . A square with \times is attached to the bottom of \neq .
- Net 3: A horizontal row of \times , ∞ , \forall , \div . A square with $=$ is attached to the top of \div . A square with \neq is attached to the bottom of \div .
- Net 4: A vertical column of $=$, \div , \neq , \times . A square with ∞ is attached to the left of \div . A square with \forall is attached to the left of \neq .

3D die showing faces \neq , \div , and ∞ .

8

Four nets for a die with faces labeled with Greek letters: ϕ , ϵ , γ , β , α , δ . The nets are:

- Net 1: A vertical column of ϕ , ϵ , γ , α . A square with δ is attached to the left of ϵ . A square with β is attached to the right of γ .
- Net 2: A vertical column of α , β , ϕ , δ . A square with ϵ is attached to the right of β . A square with γ is attached to the left of ϕ .
- Net 3: A horizontal row of α , γ , δ , ϕ , ϵ . A square with β is attached to the top of ϕ .
- Net 4: A horizontal row of ϕ , α , γ , ϵ . A square with β is attached to the top of α . A square with δ is attached to the bottom of γ .

3D die showing faces δ , ϕ , and ϵ .

9

Four nets for a die with faces labeled with symbols: \Rightarrow , \vee , \exists , Γ , \Uparrow , \sqcap , $\&$, \lrcorner , \equiv , \wedge , \Leftarrow , \equiv , \Uparrow , $\&$, \lrcorner , \equiv , \wedge , \Leftarrow , \equiv . The nets are:

- Net 1: A vertical column of \Rightarrow , \vee , \exists , Γ . A square with \Uparrow is attached to the right of \vee . A square with \equiv is attached to the right of \exists .
- Net 2: A horizontal row of \Uparrow , \sqcap , $\&$, \lrcorner . A square with \vee is attached to the top of \lrcorner . A square with \equiv is attached to the bottom of \lrcorner .
- Net 3: A horizontal row of \Uparrow , \sqcap , \exists , \lrcorner . A square with \equiv is attached to the top of \lrcorner . A square with \wedge is attached to the bottom of \lrcorner .
- Net 4: A vertical column of \Uparrow , $\&$, \vee , \Leftarrow . A square with Γ is attached to the left of \vee . A square with \equiv is attached to the right of \Leftarrow .

3D die showing faces \Uparrow , $\&$, and \equiv .

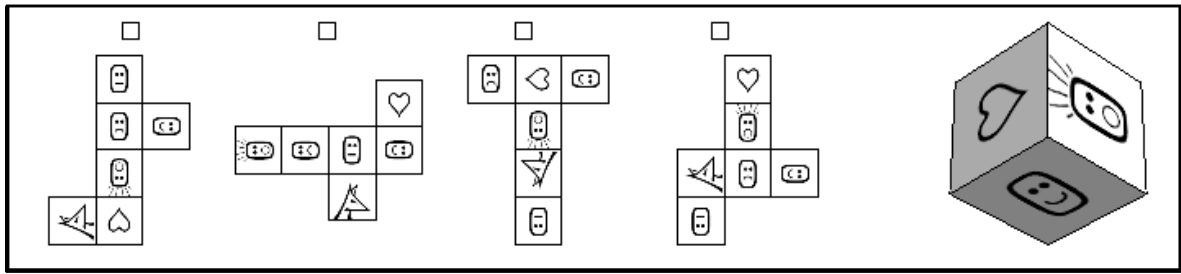
10

Four nets for a die with faces labeled with mathematical symbols: \neq , \div , $=$, \forall , \times , \leq , ∞ . The nets are:

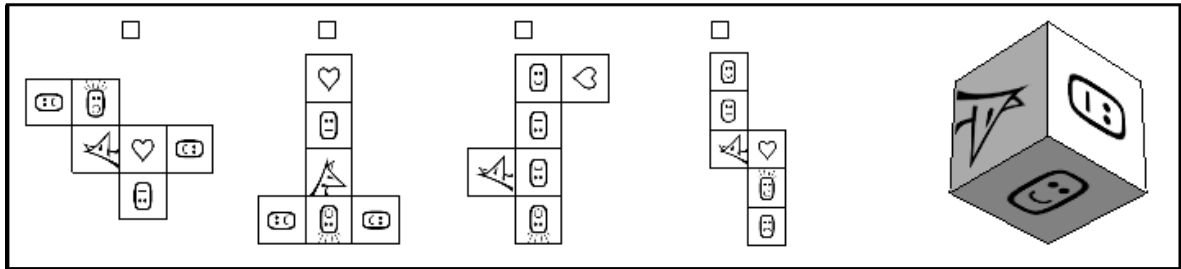
- Net 1: A horizontal row of \neq , \div , $=$, \forall . A square with \times is attached to the bottom of \forall . A square with ∞ is attached to the top of $=$.
- Net 2: A vertical column of $=$, \forall , \neq , \div . A square with \times is attached to the right of \forall . A square with ∞ is attached to the right of \neq .
- Net 3: A horizontal row of ∞ , \times , \div , \forall , \neq . A square with $=$ is attached to the top of \div . A square with \leq is attached to the bottom of \forall .
- Net 4: A vertical column of $=$, \div , \neq , \times . A square with ∞ is attached to the right of \div . A square with \leq is attached to the bottom of \times .

3D die showing faces \times , \div , \forall , \neq , and ∞ .

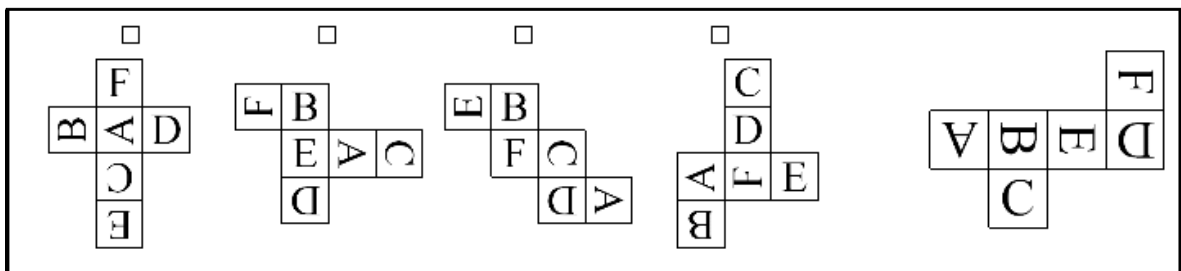
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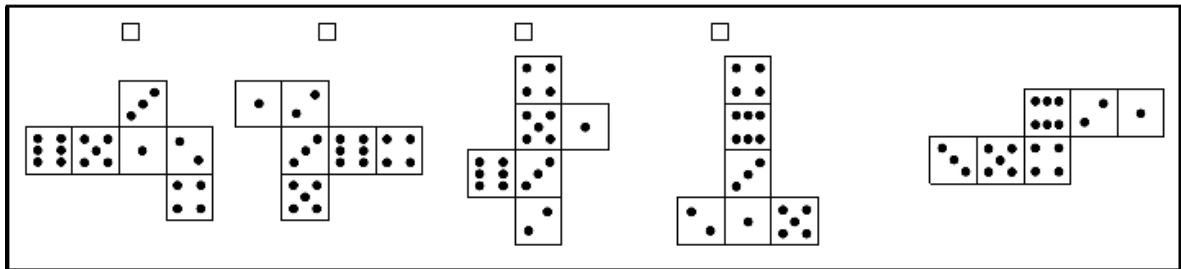
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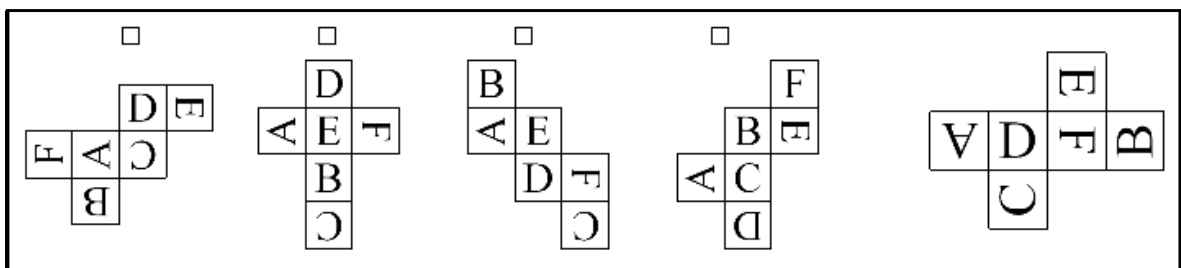
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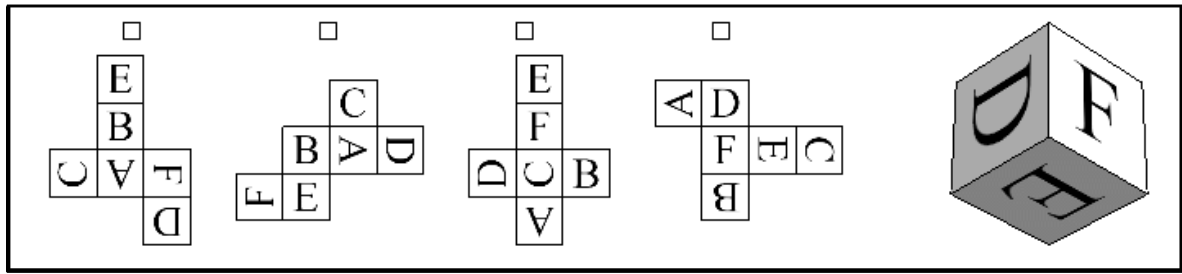
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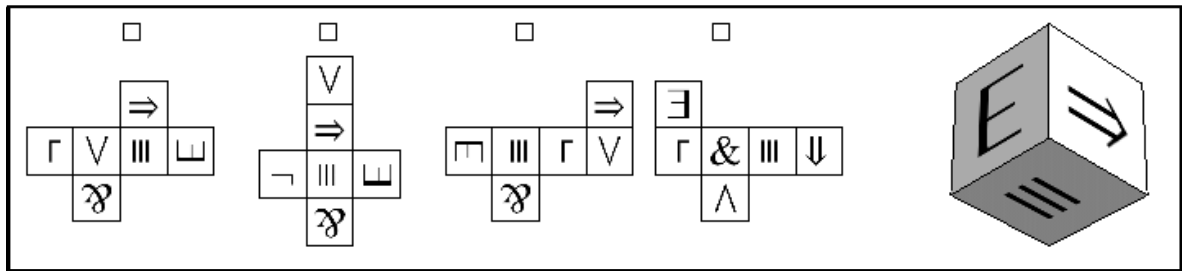
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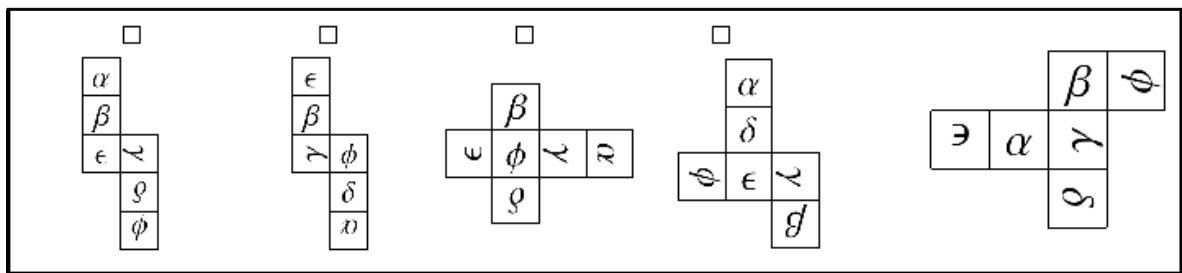
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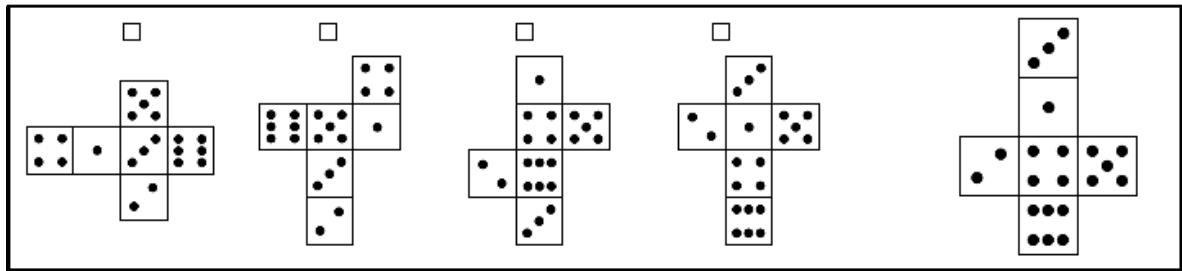
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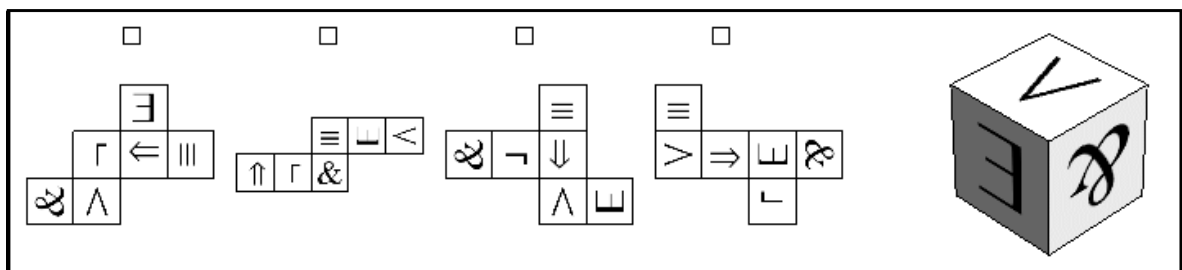
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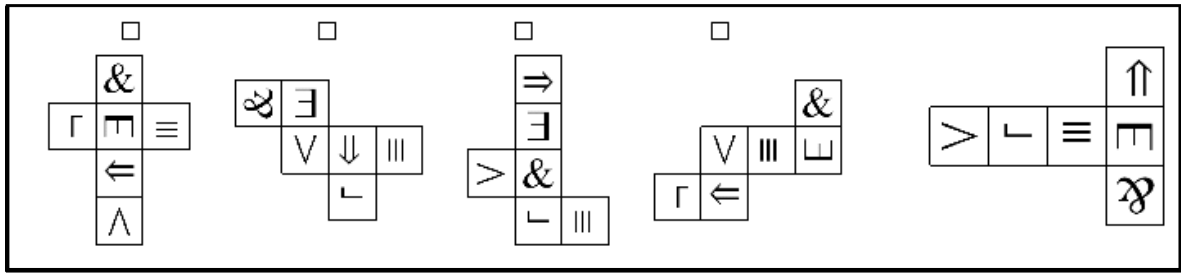
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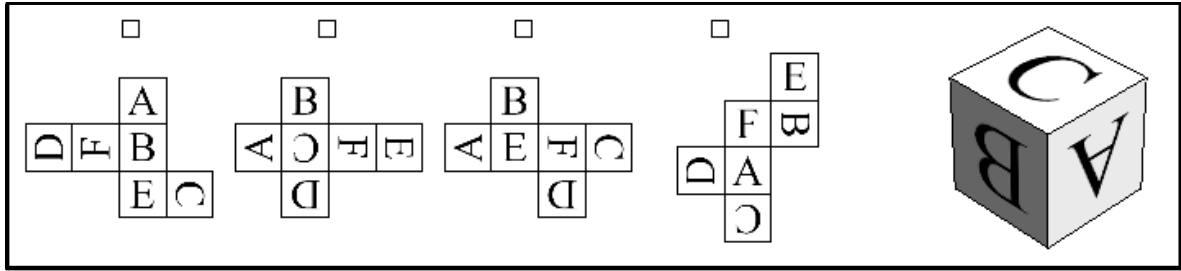
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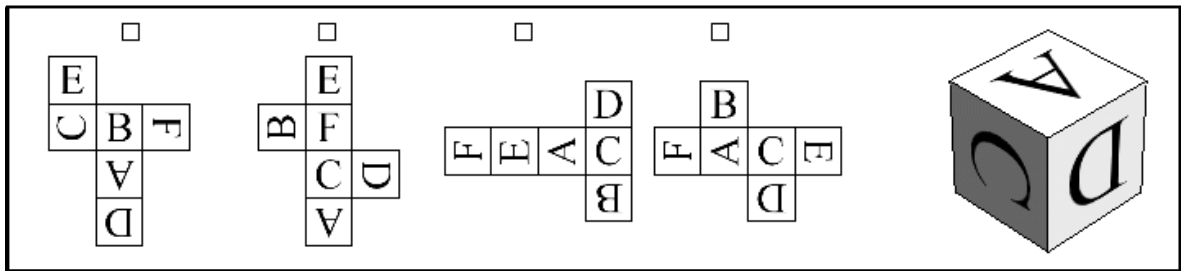
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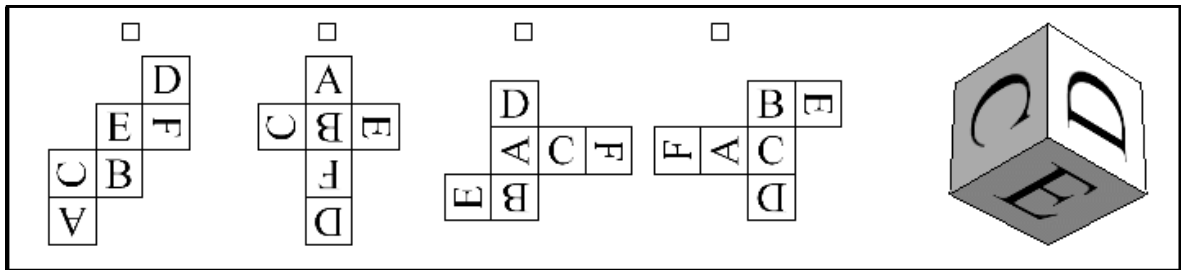
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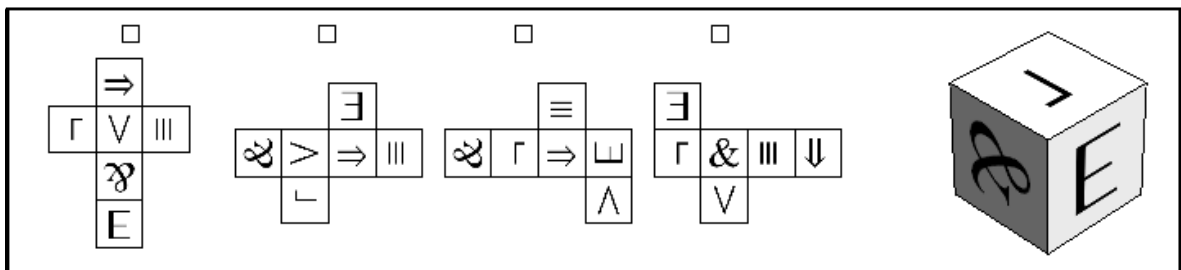
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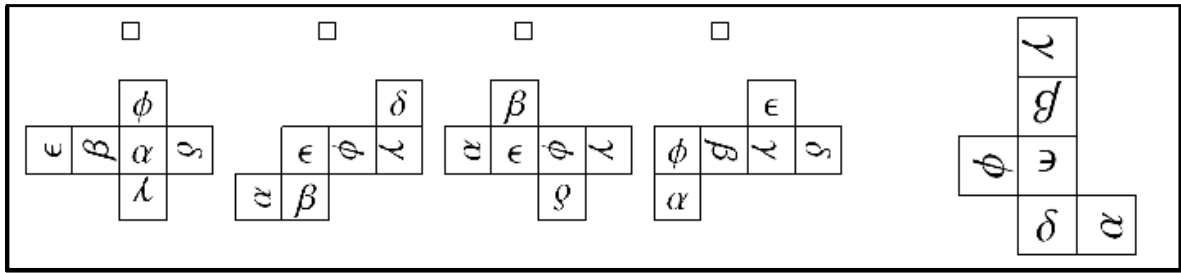
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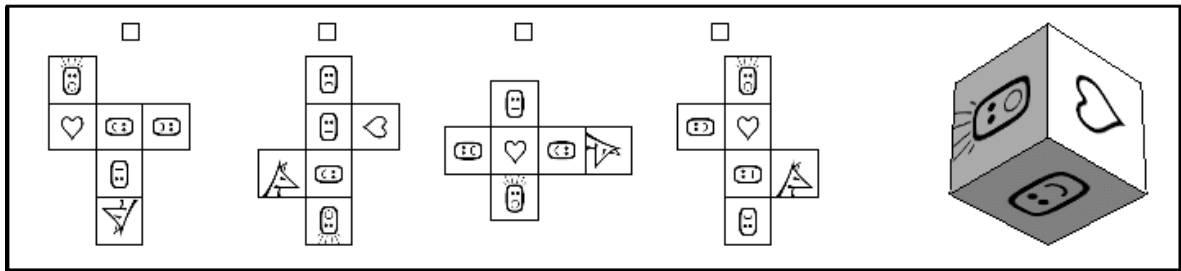
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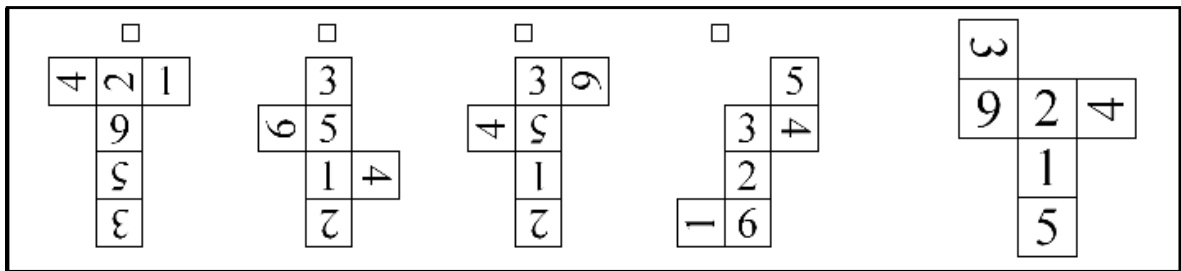
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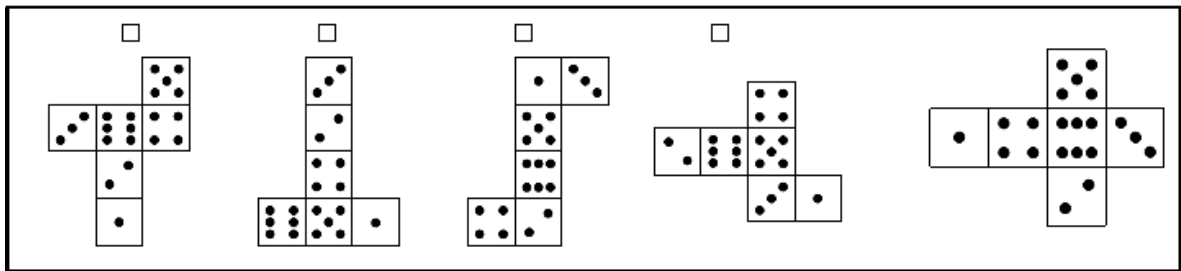
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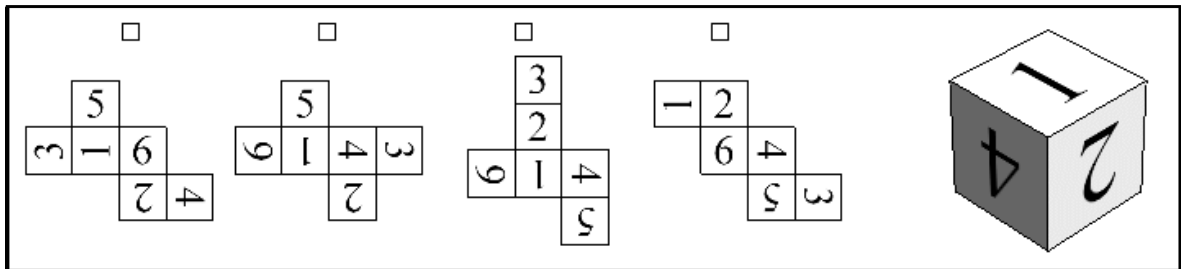
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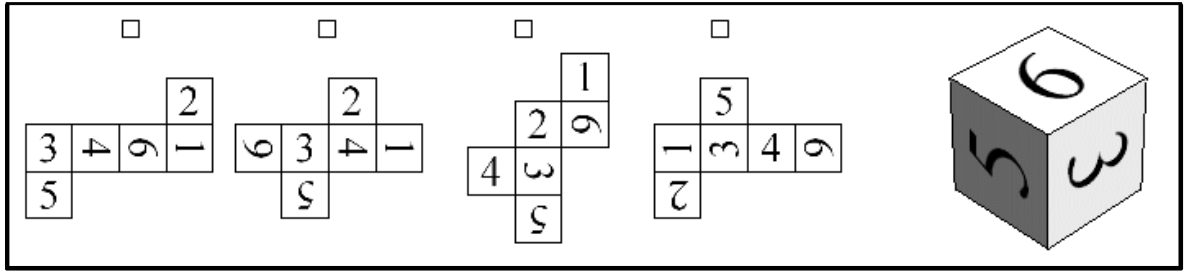
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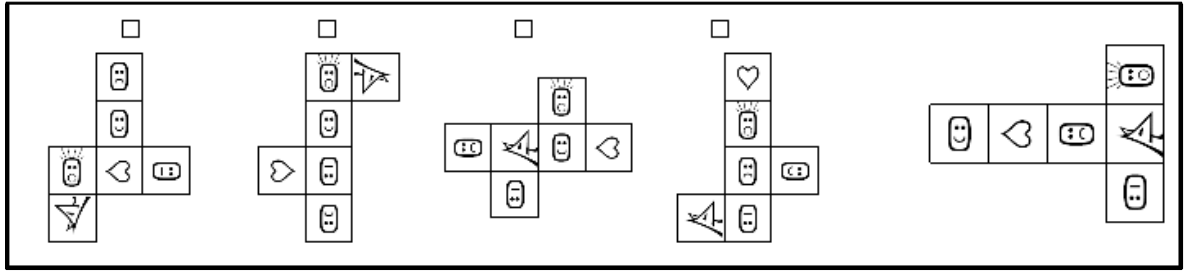
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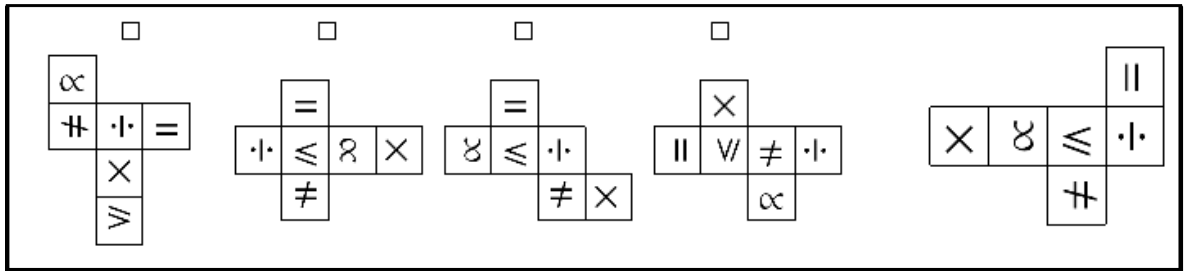
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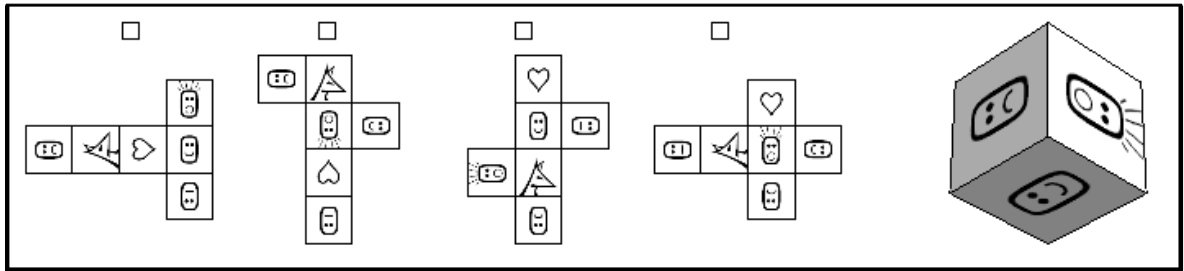
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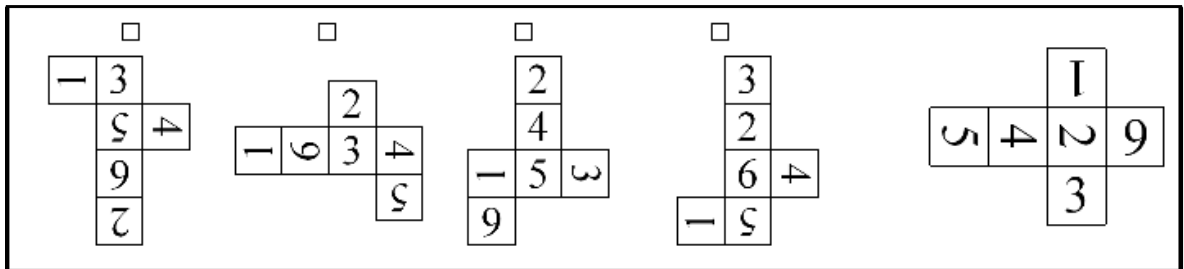
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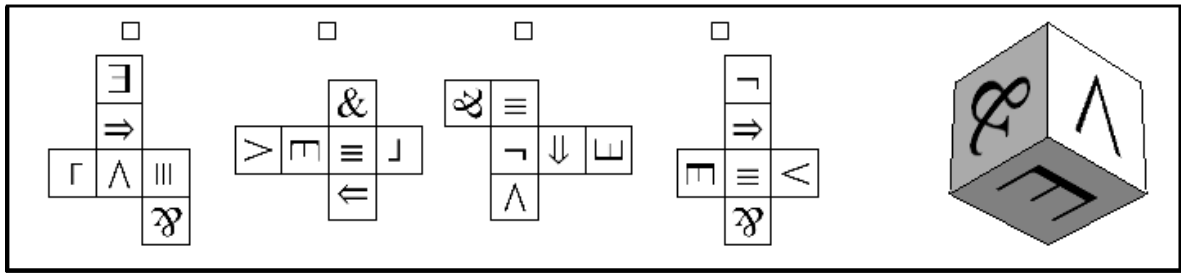
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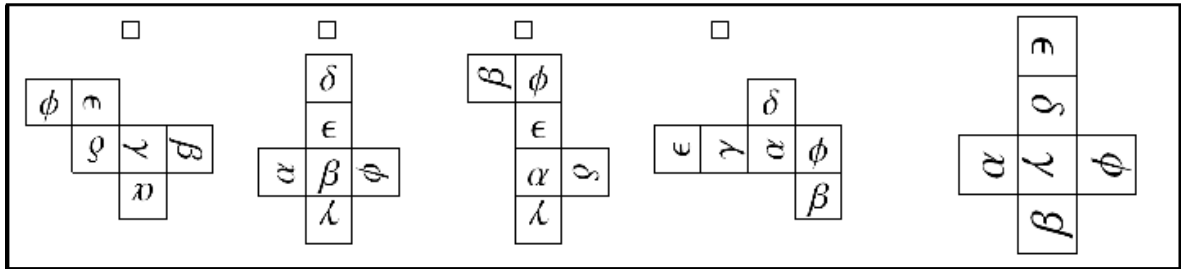
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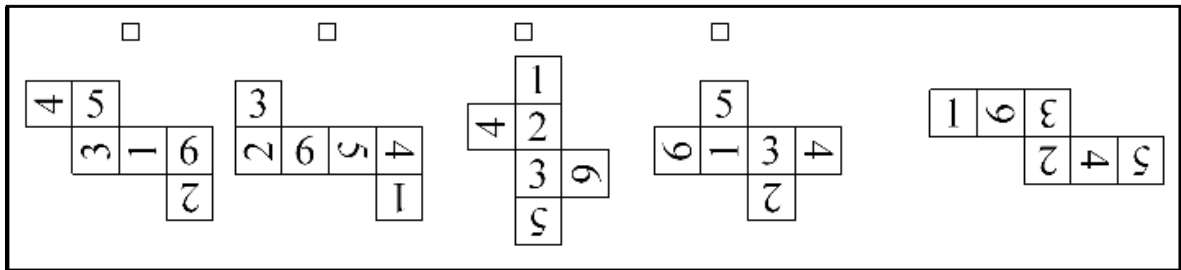
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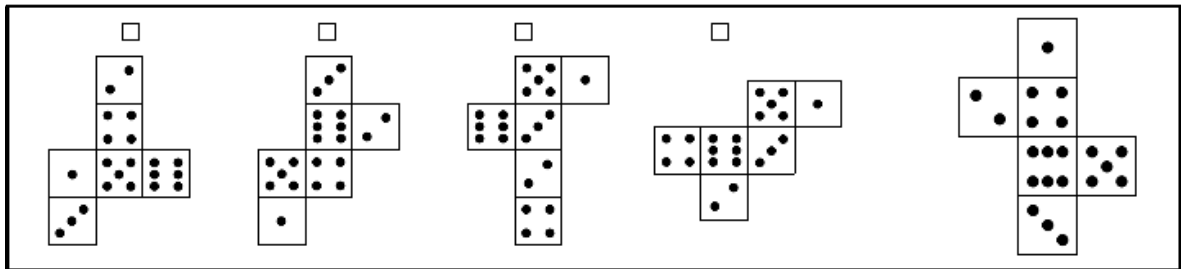
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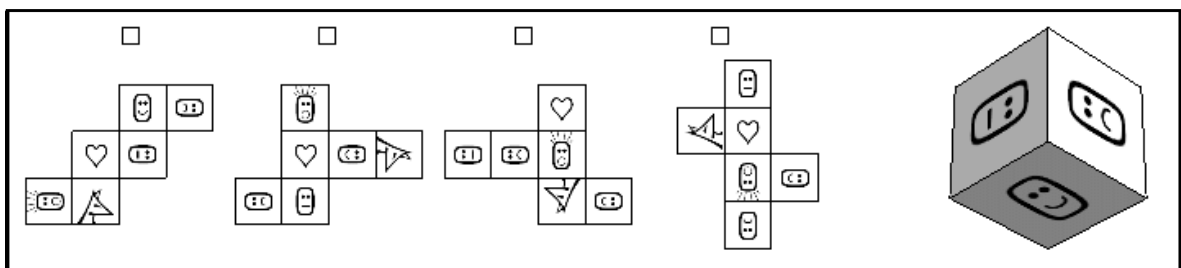
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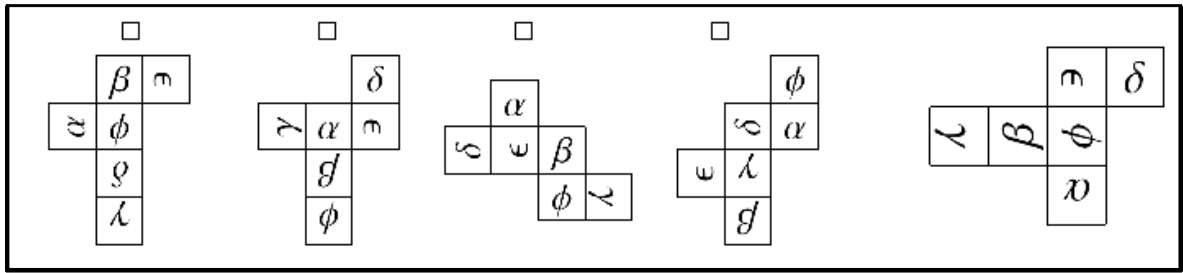
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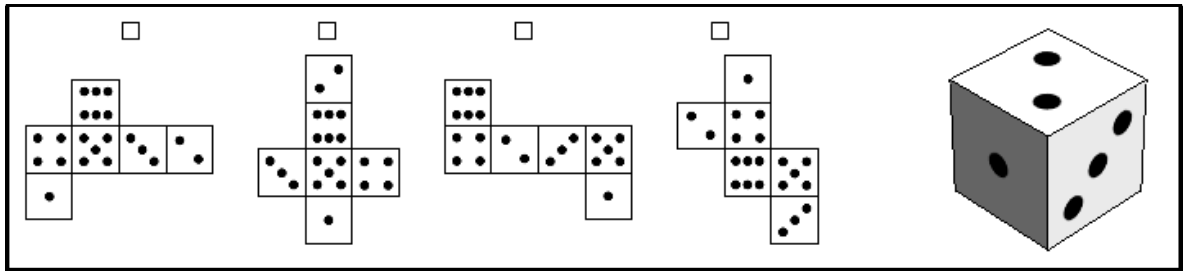
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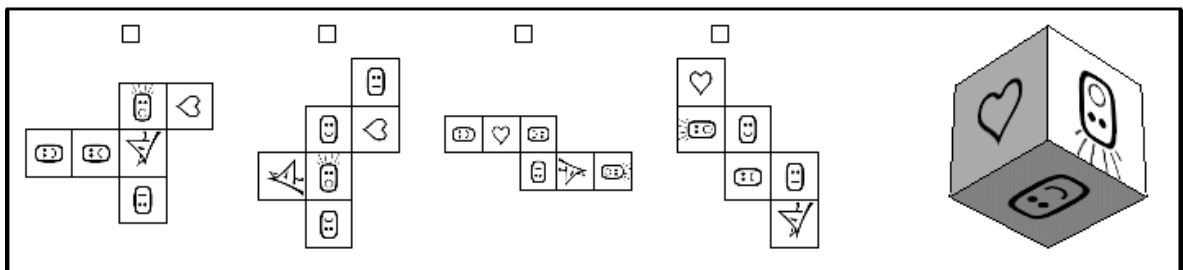
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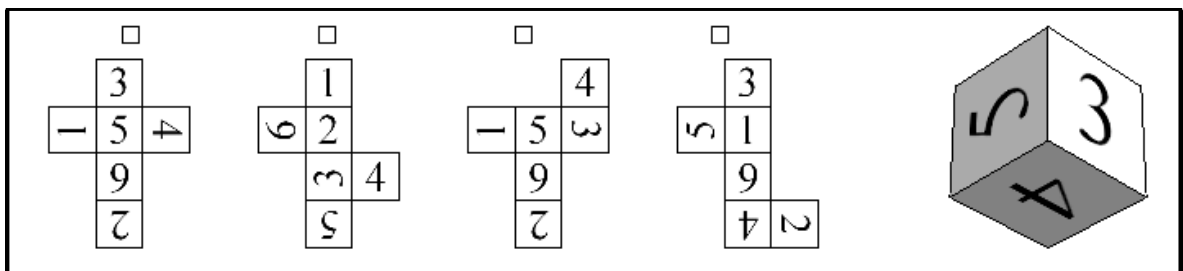
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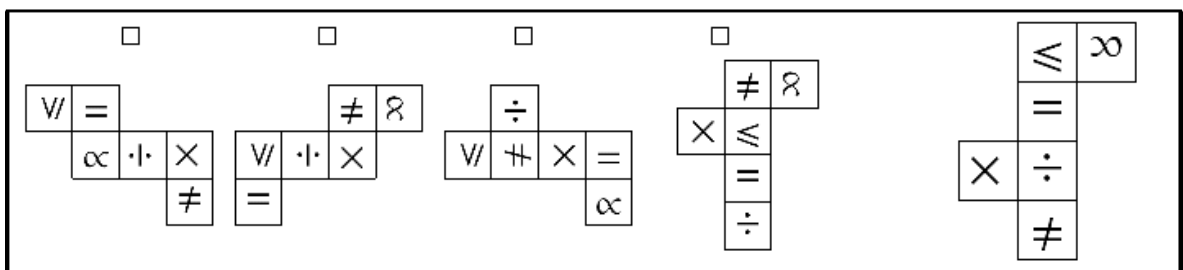
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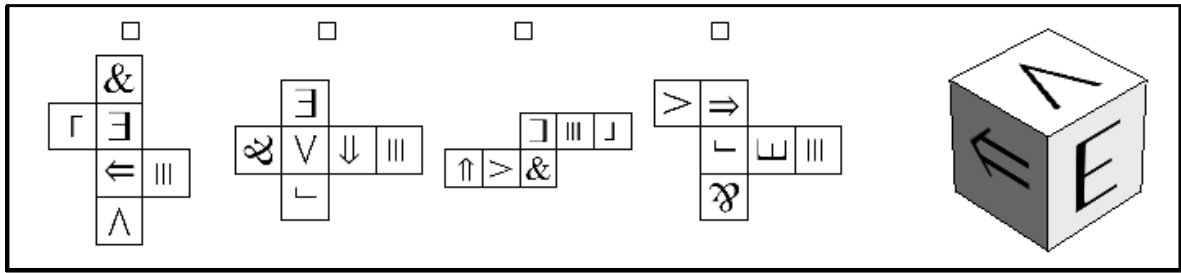
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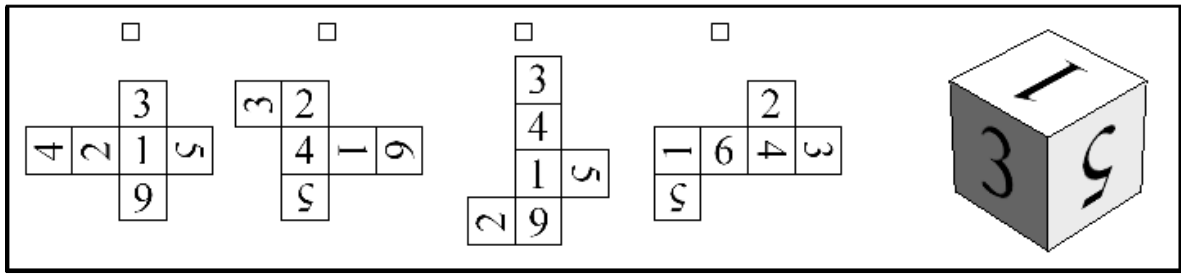
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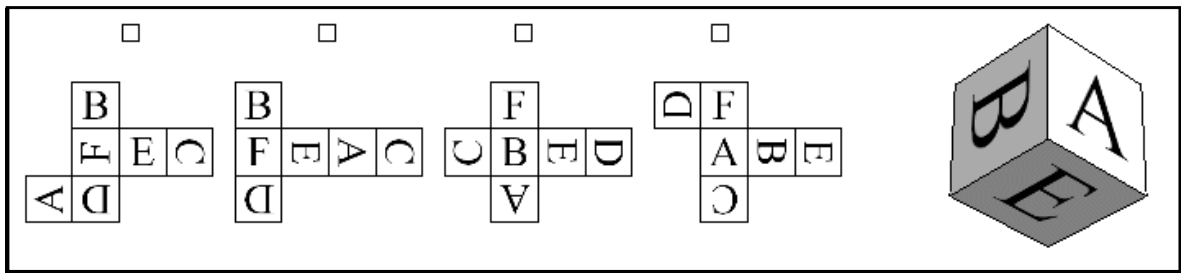
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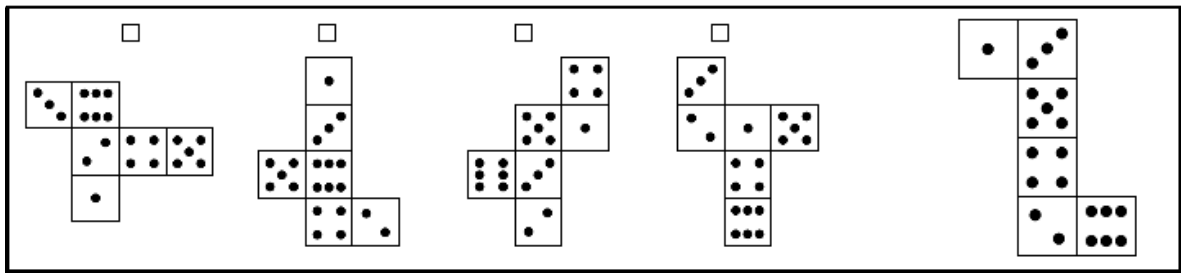
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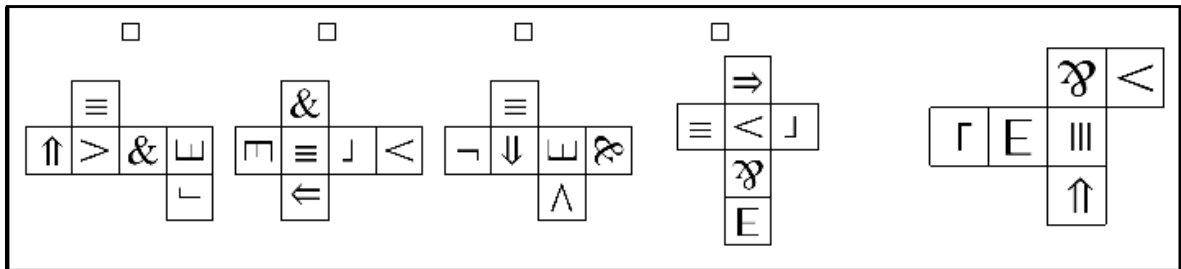
53



54



55



56

Four nets for a die are shown, each with a small square above it. The numbers on the faces are:

- Net 1: 5, 3, 6, 4, 2, 1
- Net 2: 4, 1, 2, 9, 3, 5
- Net 3: 5, 6, 2, 3, 4, 1
- Net 4: 3, 2, 6, 4, 5, 1

To the right is a 3D die with faces showing 2, 9, and 4.

57

Four nets for a die are shown, each with a small square above it. The symbols on the faces are:

- Net 1: ∞ , \parallel , \leq , \neq , \div , \times
- Net 2: $=$, \times , \div , \leq , ∞ , \neq
- Net 3: $=$, \div , \times , α , \wedge , \neq
- Net 4: \div , \neq , ∞ , \times , \leq , $=$

To the right is a 3D die with faces showing ∞ , \parallel , \wedge , \div , \neq , and \times .

58

Four nets for a die are shown, each with a small square above it. The Greek letters on the faces are:

- Net 1: α , ϕ , β , γ , ϵ , δ
- Net 2: β , ϕ , ϵ , α , γ , λ
- Net 3: γ , β , ϕ , ϵ , α , ν
- Net 4: ϕ , δ , α , β , γ , ϵ

To the right is a 3D die with faces showing ϕ , δ , and ϵ .

59

Four nets for a die are shown, each with a small square above it. The Greek letters on the faces are:

- Net 1: γ , β , ϵ , δ , α , ϕ
- Net 2: δ , α , ν , β , ϵ , γ
- Net 3: α , ϵ , β , λ , ν , ϕ
- Net 4: δ , ϵ , γ , α , β , ϕ

To the right is a 3D die with faces showing γ , β , and ν .

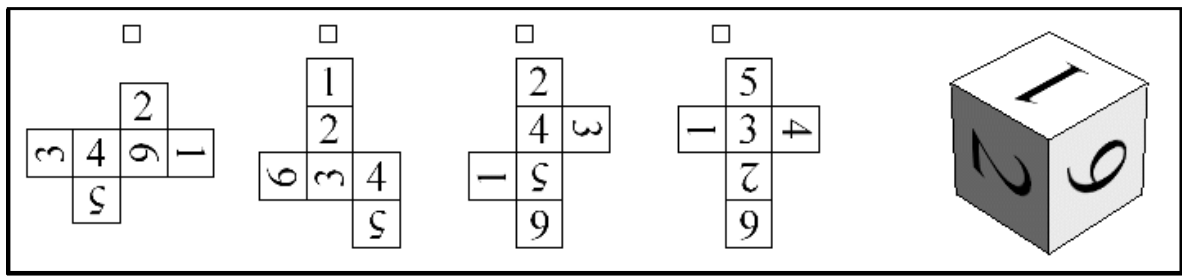
60

Four nets for a die are shown, each with a small square above it. The letters on the faces are:

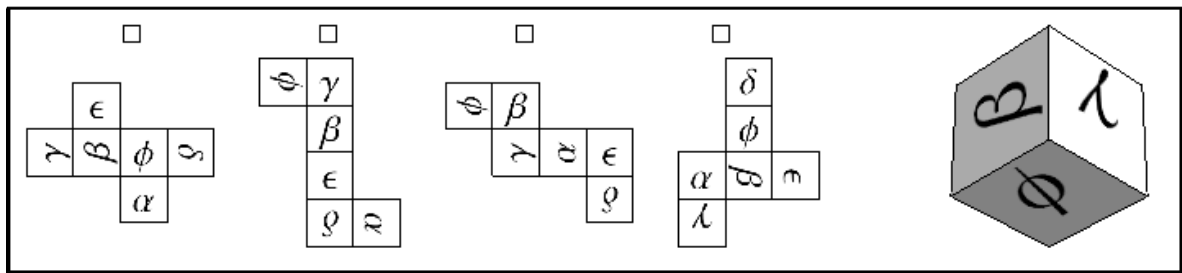
- Net 1: C, A, F, B, E, D
- Net 2: F, B, C, E, D, V
- Net 3: A, B, E, F, C, D
- Net 4: E, C, D, F, A, B

To the right is a 3D die with faces showing A, B, and E.

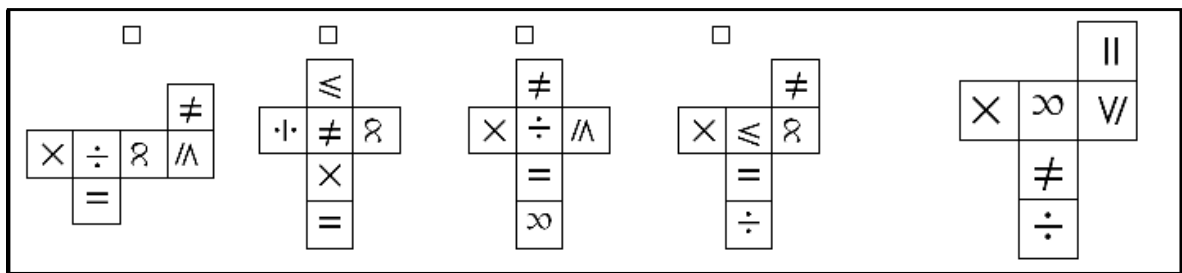
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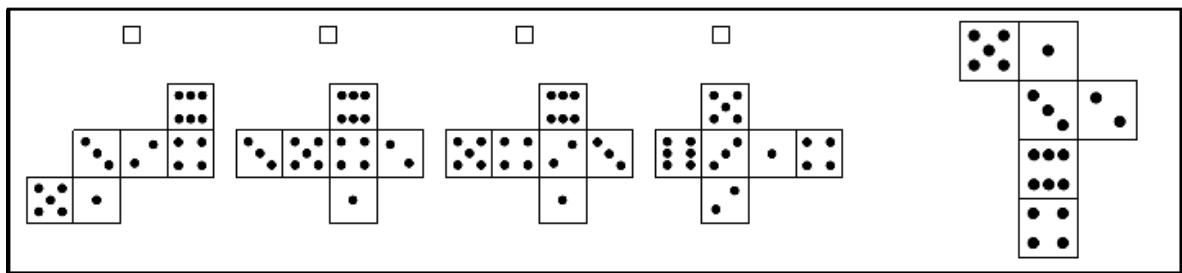
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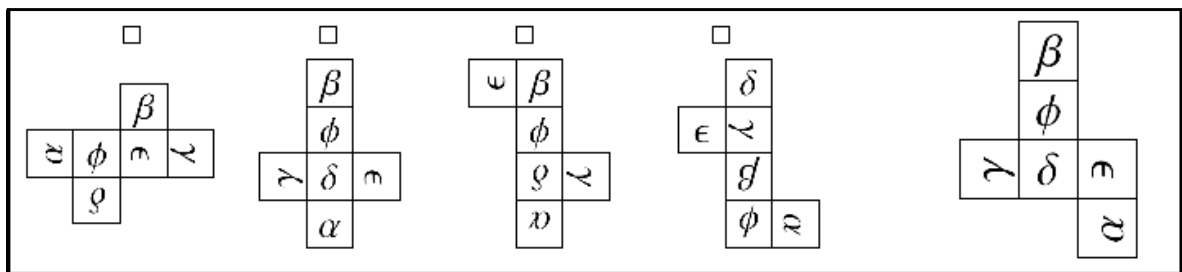
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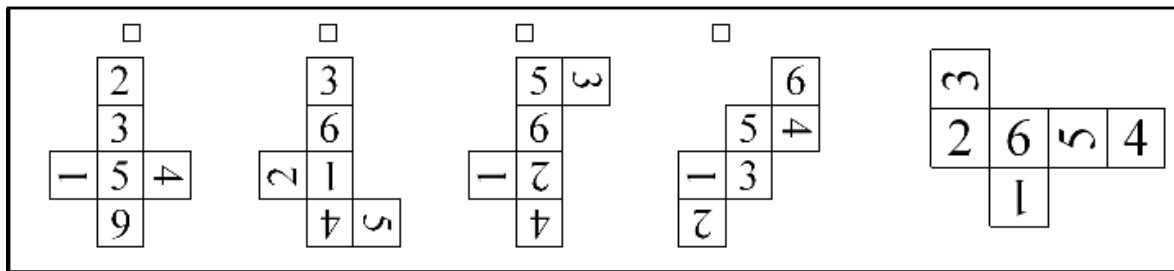
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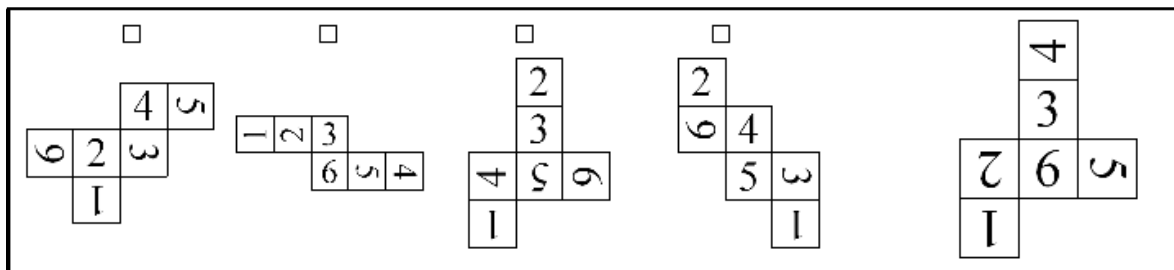
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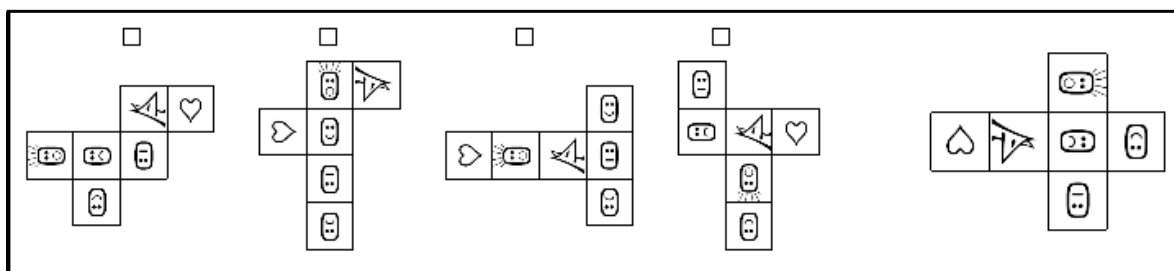
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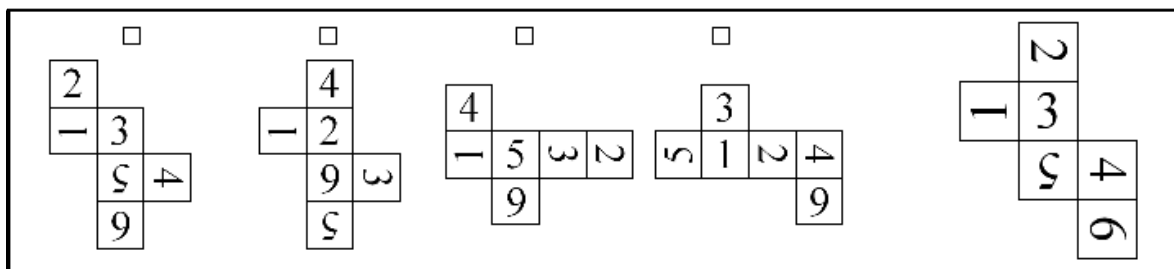
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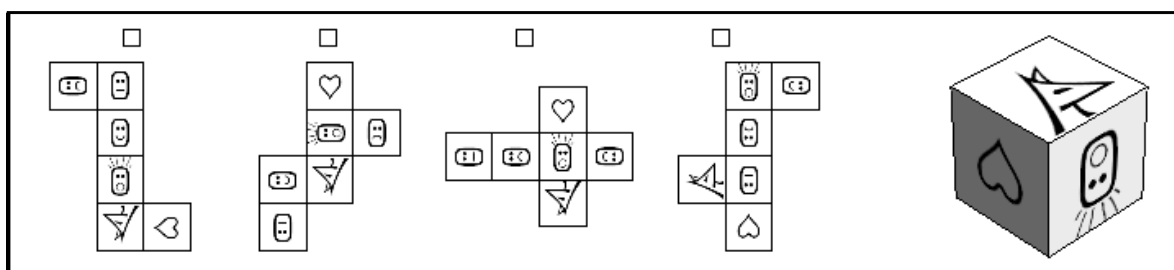
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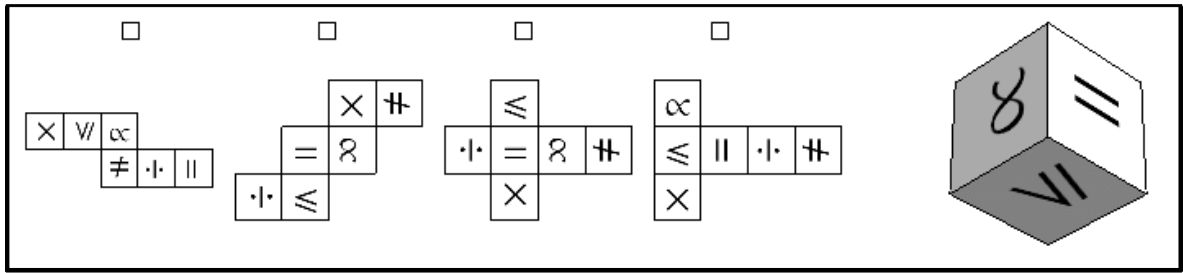
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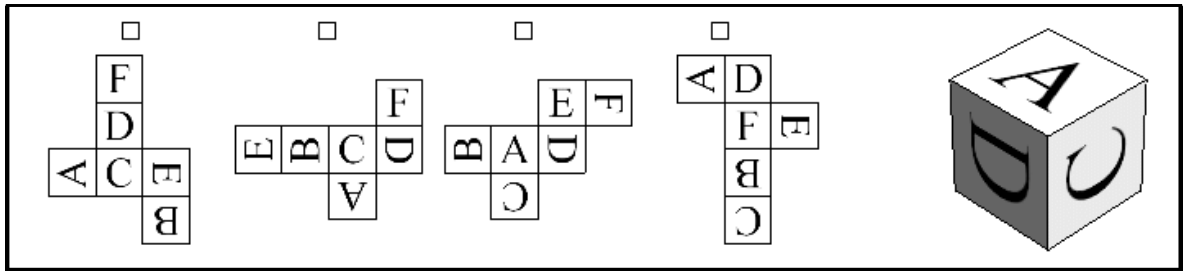
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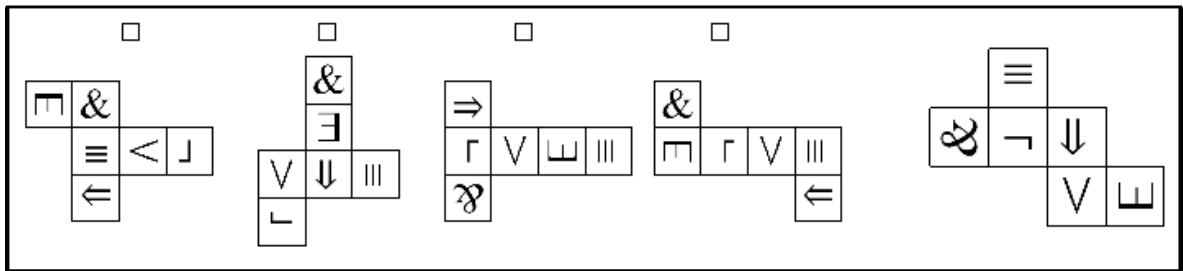
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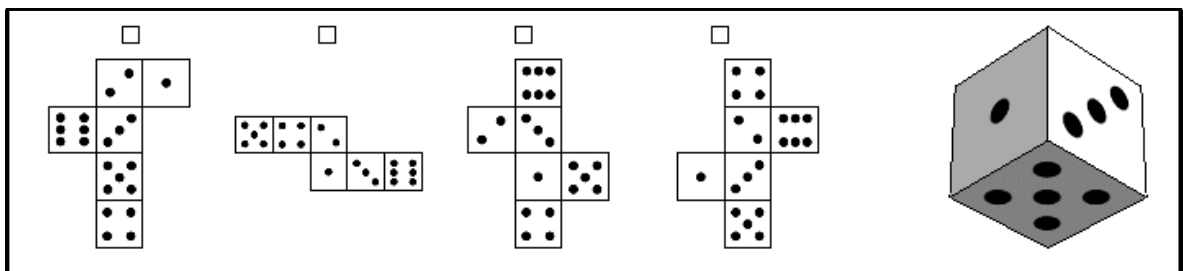
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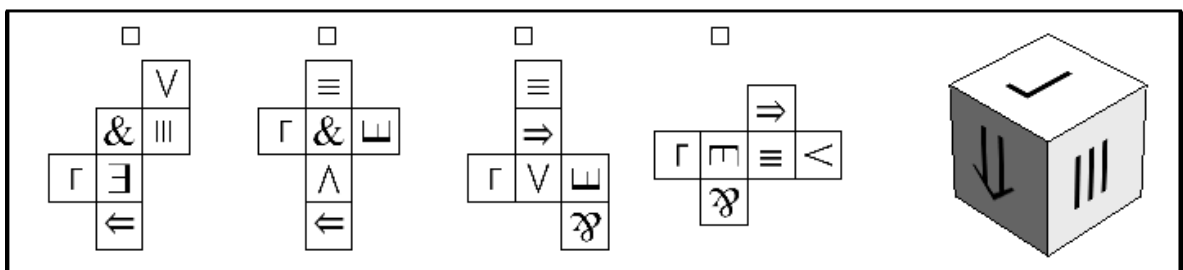
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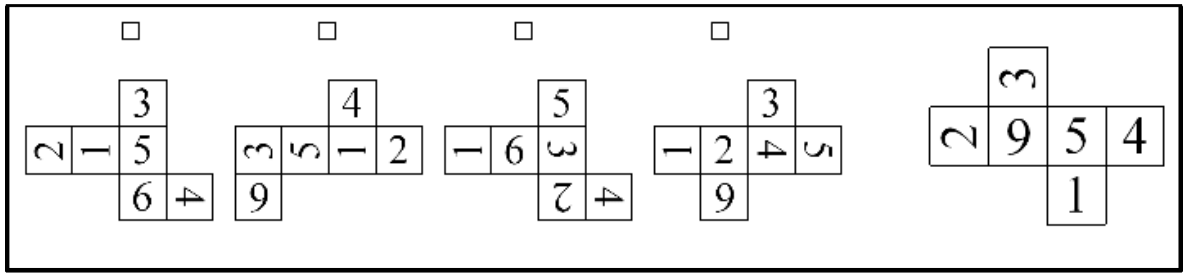
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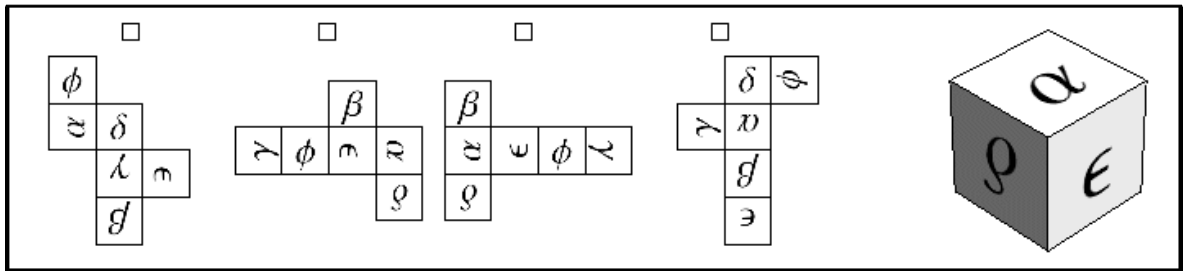
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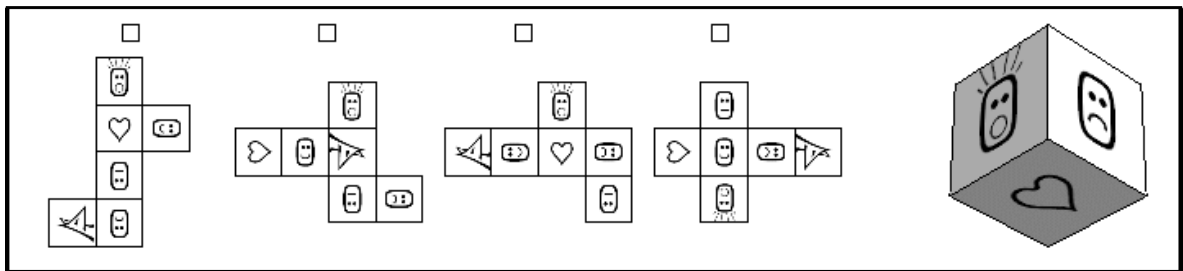
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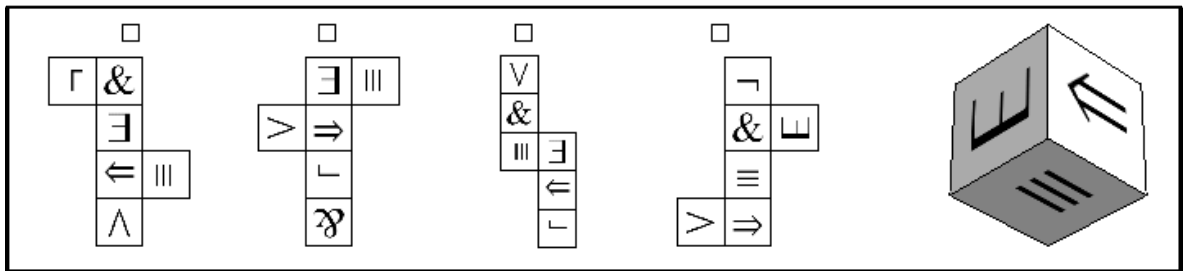
87



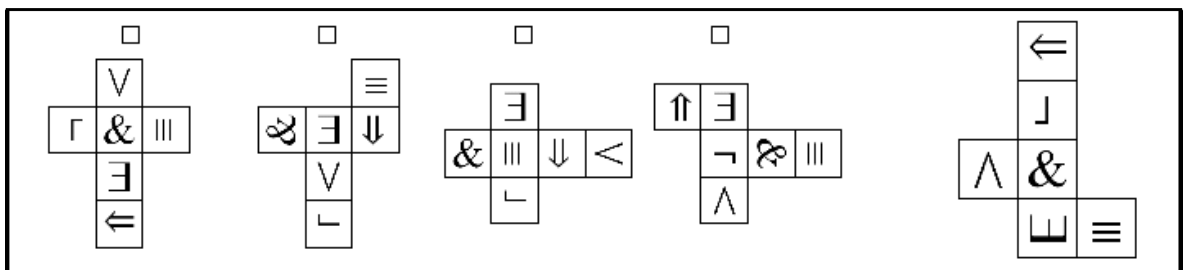
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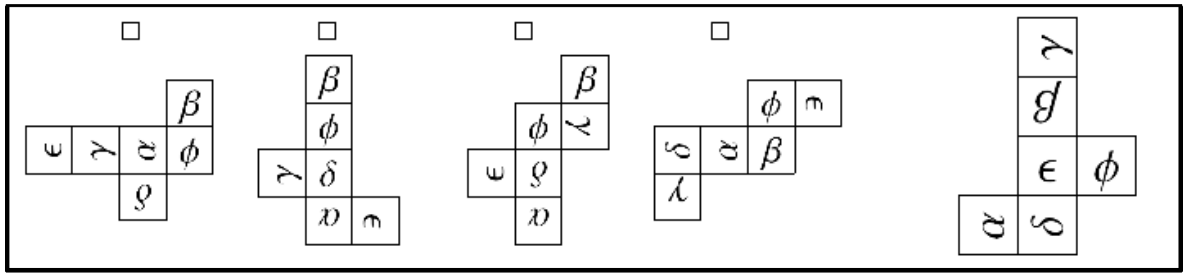
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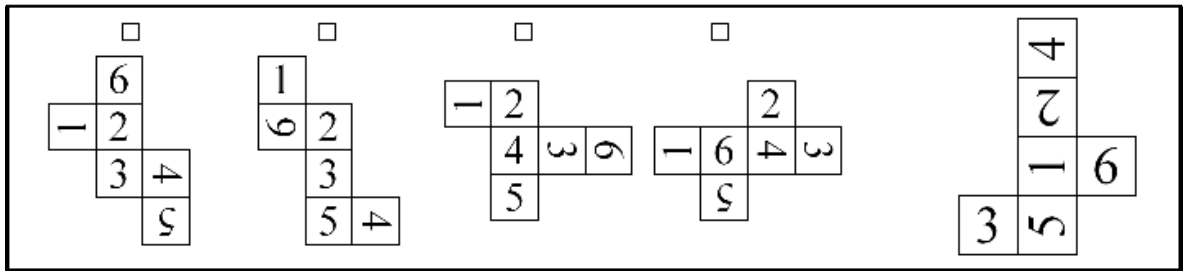
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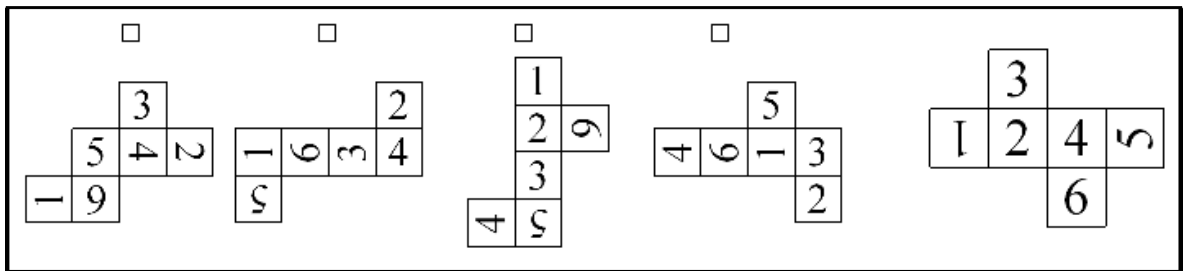
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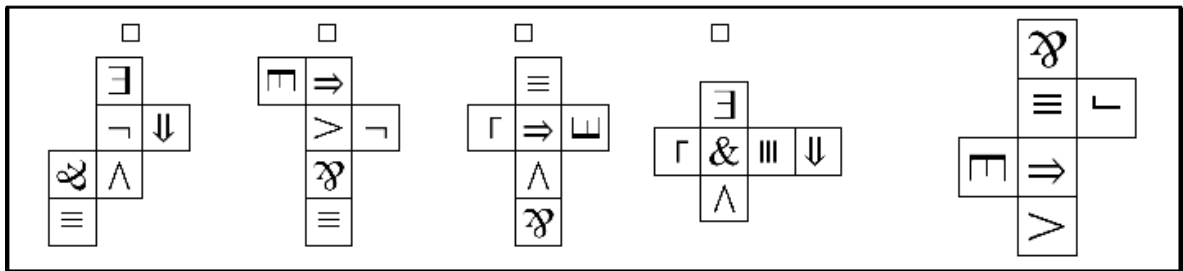
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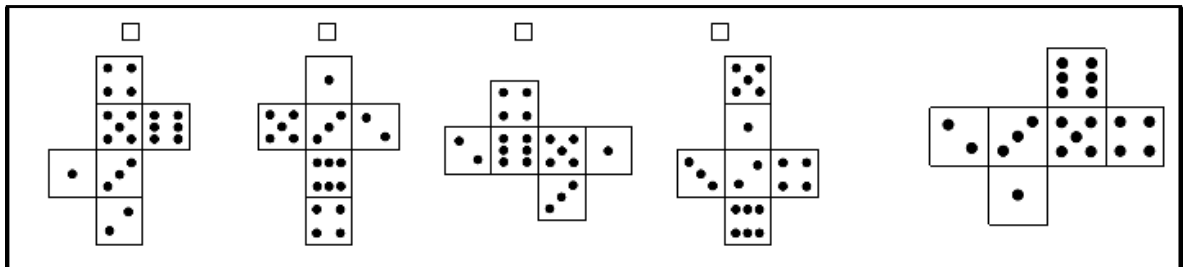
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99



100



Solutions:

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99	2
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100	2
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Reference:

Referencca:

Izidor Hafner

"Deduce the Net for a Die"

<http://demonstrations.wolfram.com/DeduceTheNetForADie/Wolfram>

Demonstrations Project

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