1. Identify the nets which can be used to make cubes (cut out copies of the nets and try it):
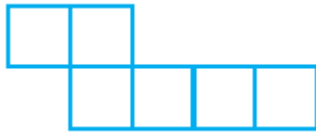**(i)**

Solution:-
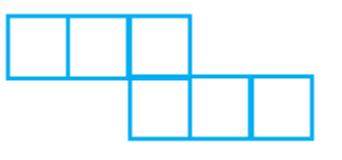The given net cannot be folded as cube.
Because, it can be folded as below,

(ii)

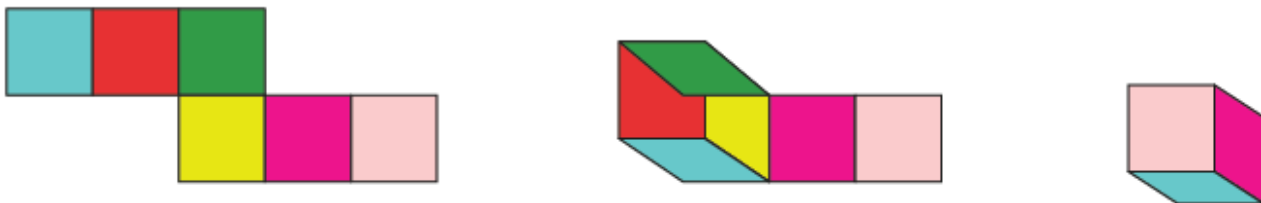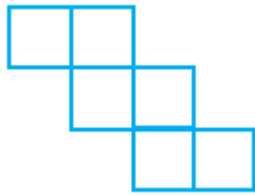**Solution:-**
The given net can be folded as cube.
Because, it can be folded as below,

(iii)

Solution:-
The given net can be folded as cube.
Because, it can be folded as below,

(iv)

Solution:-
The given net can be folded as cube.
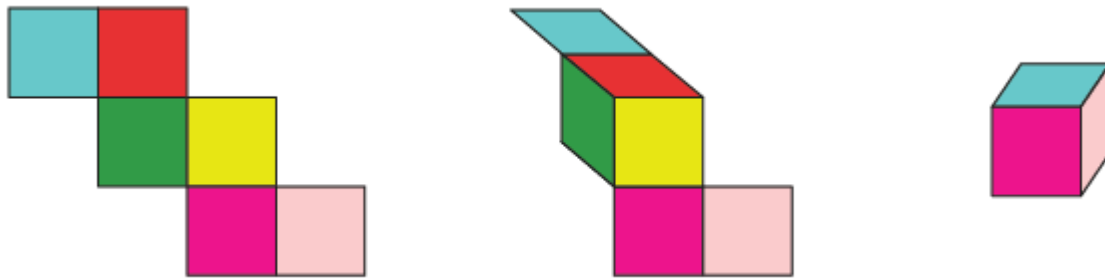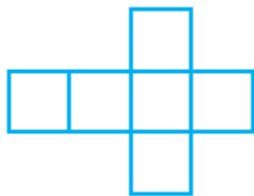Because, it can be folded as below,

(v)

Solution:-

The given net cannot be folded as cube.

Because, it can be folded as below,

(vi)

Solution:-

The given net can be folded as cube.

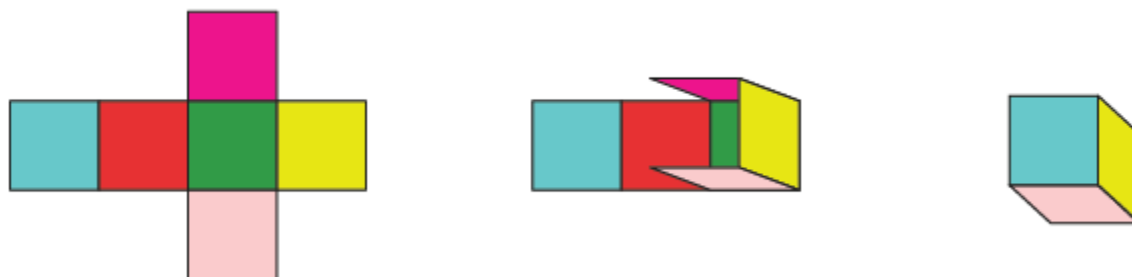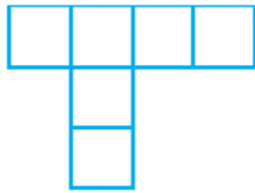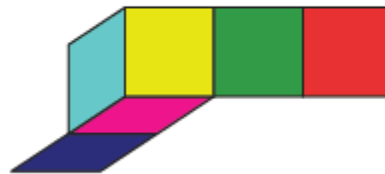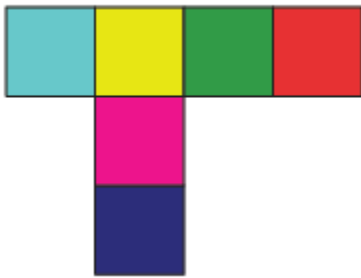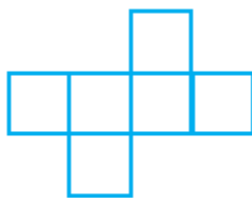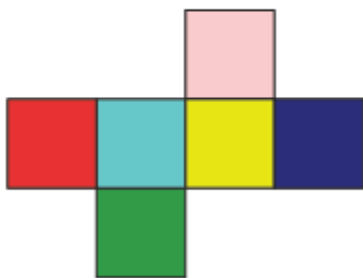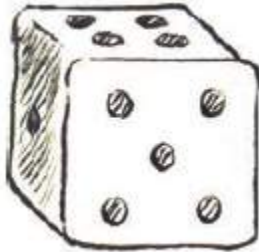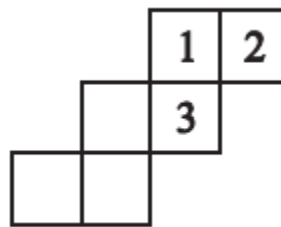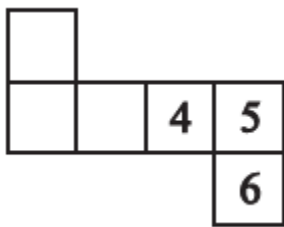Because, it can be folded as below,

2. Dice are cubes with dots on each face. Opposite faces of a die always have a total of

seven dots on them.

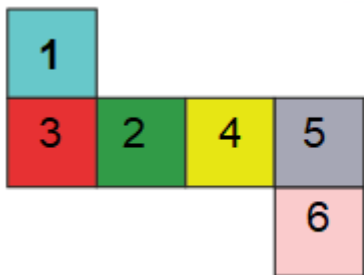**Here are two nets to make dice (cubes); the numbers inserted in each square indicate the number of dots in that box.**

Insert suitable numbers in the blanks, remembering that the number on the opposite faces should total to 7.
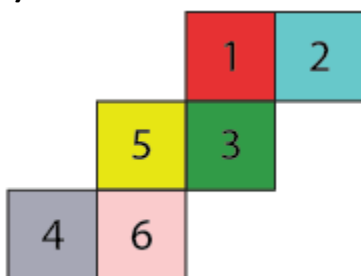
Solution:-

(i)

By observing the above figure the sum of the opposite faces is equal to 7.
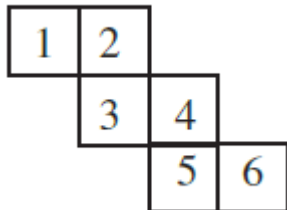So, the given net can be folded into a net of dice.

(ii)

By observing the above figure the sum of the opposite faces is equal to 7.
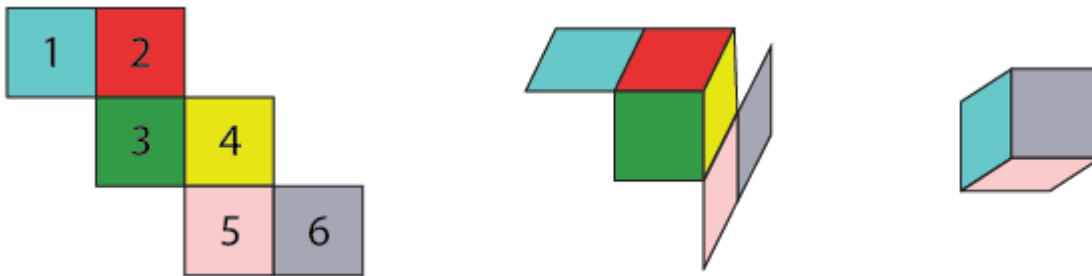So, the given net can be folded into a net of dice.

3. Can this be a net for a die?
Explain your answer.

```
┌───┬───┐
│ 1 │ 2 │
└───┼───┼───┐
    │ 3 │ 4 │
    └───┼───┼───┐
        │ 5 │ 6 │
        └───┴───┘
```
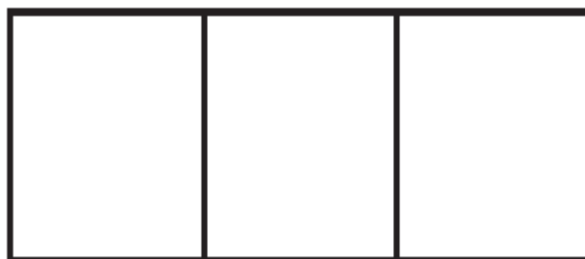
Solution:-
The given net is folded as dice is shown in figure below,

No, this cannot be a net for a die.
By observing the figure we can say that, one pair of opposite face will have 1 and 4, another pair of opposite face will have 3 and 6 the sum of these two opposite faces are not equal to 7.

4. Here is an incomplete net for making a cube. Complete it in at least two different ways. Remember that a cube has six faces. How many are there in the net here? (Give two separate diagrams. If you like, you may use a squared sheet for easy manipulation.)
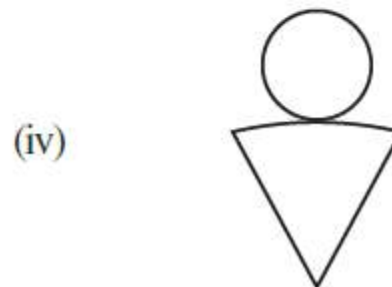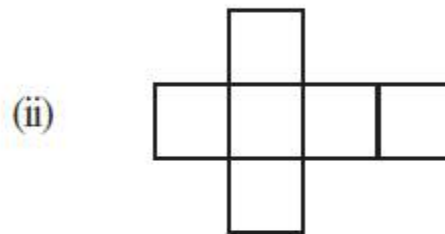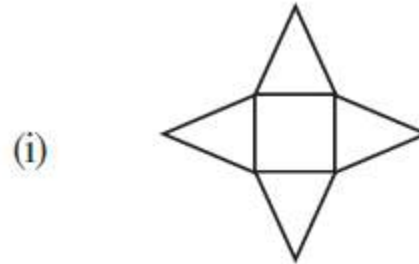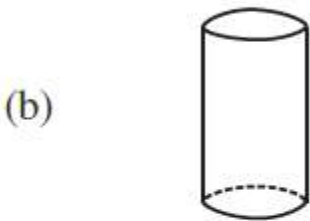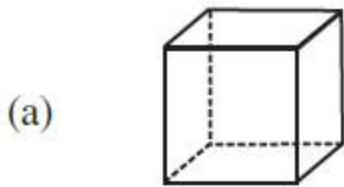

Solution:-

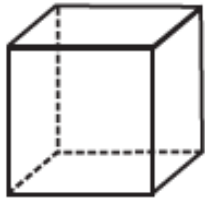In the given net there are 3 faces and it can be completed as shown below,
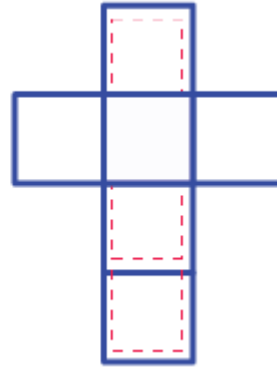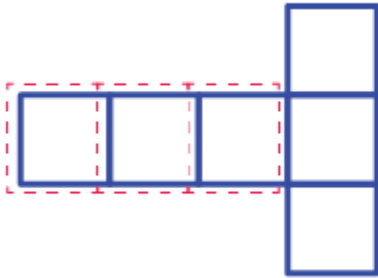
5. Match the nets with appropriate solids:

(a)

(b)

(c)

(d)

(i)

(ii)

(iii)

(iv)

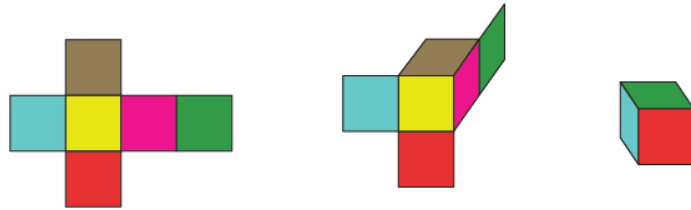**Solution:-**

(a)   **(ii)**

Because, the net (ii) can be folded as square.
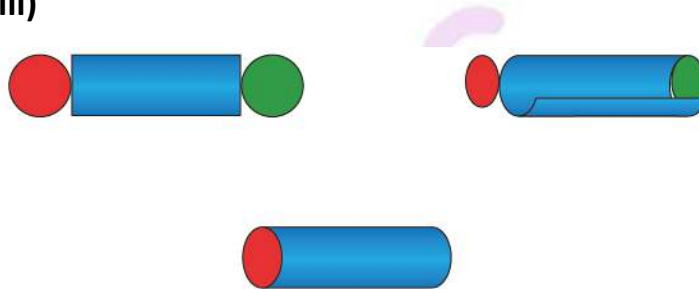
(b)   **(iii)**

Because, the net (iii) can be folded as cylinder.

(c)   **(iv)**

Because, the net (iv) can be folded as cone.

(d)   **(i)**

Because, the net (i) can be folded as pyramid.