**中学校第１学年理科　第１分野「光（屈折と反射）」**（解答例）

ぐ



Ａ

※　矢印の長さは５cm

Ａ’



Ｂ

Ｂ’

1. 右図

＜作図の方法＞

１　鏡Ａによってできるまさとくんの像「まさとくん①」

の位置に**・**を打つ。

２　鏡Ｂによってできる「まさとくん①」の像「まさと

くん②」の位置に**・**を打つ。この点がア’である。

３　「よしおくん」と「まさとくん②」を線で結ぶ。

４　鏡Ｂで反射する点と「まさとくん①」を線で結ぶ。

５　鏡Ａで反射する点と「まさとくん」を線で結ぶ。

６　光が進む方向に矢印をつける。

1. 下図

まさとくん①

まさとくん②

ア

鏡Ａ

よしおくん

まさとくん

鏡Ｂ

イ

ア’

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | ｆ |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | ｄ | ｅ |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ａ |  | ｃ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | ｂ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  | 鏡Ａに対して点アと対象になる点を取ることで、∠ａと∠ｂが等しくなる。  また、∠ａと∠ｃは対頂角なので等しい。  よって∠ａと∠ｃが等しくなり、反射の法則を満たす。  右上の∠ｄ、∠ｅ、∠ｆについても同様。 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |