



# இருபுடைச் சமச்சீர்

C'' EöhzuU PøEuß %o»® } [ PÒ

2 C, |øha \©a^øµU öPös h uí Ä, UPøÍ AÔçx öPöÖÁuøS®

2 C, |øha \©a^µöÚ K° E, ÄÄ Auß \©a^° Aaø\ ÁøµÁuøS®

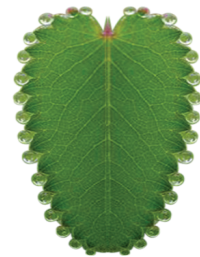
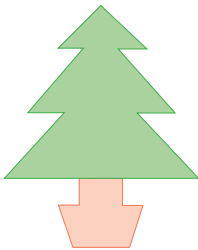
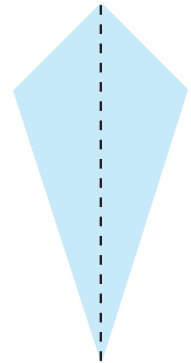
2 \xµU ÷Pömkz uóÍ ß «x C, |øha \©a^øµU öPös h uí Ä, UPøÍ Aø©''EuøS®

÷uøÁ- öÚ BøÓÀPøÍ '' öÉÖÄ°PÒ.

## 1.1 C, |øha \©a^°

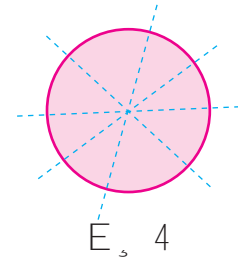
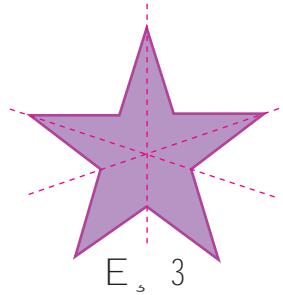
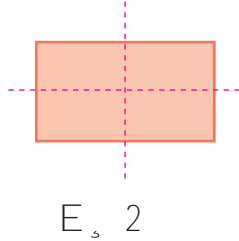
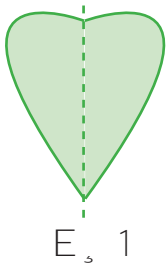
|öøEUPÀ Ái Á• øh^- }» { Ó A mø h ö^- öß Öß E, Á® C [ ÷P uµ''EmkÖÍ x. Cçu E, ÄÄ Pömh''EmkÖÍ |ÖÍ U ÷Pömi ß ÁÈ ÷^- ©i ''Euß %o»® JBÖh öÚöß Ö öÉö, çx® \©ÚöÚ Cµs k ESvPÒ öÉÖ''Ek®.

SÖzu ÷PööhößÖß ÁÈ ÷^- ©i US® ÷Éöx JBÖh öÚöß Ö öÉö, çx® Es øø ÚU öPös h ÷©¾® ] » E, Á [ PÒ R÷Ç uµ''EmkÖÍ Ú.



\ Ç¼Ä Pön UTi^- A ÷ÚP©öÚ öÉö, ÖPÒ \©ÚöÚ C, EUP [ PÍ öP ÷Á ÖEk zuUTi^- øÁ. C'' Es øø ÚU öPös huöÄ Auß AÇSUS Cx Pöµn ©öQBÓx. CÆÁöÓöÚ Es |PøÍ U öPös h uí Ä, UPøÍ 2® A h°PøÍ 2® ÉÖÖ ÷©¾® A Ôçx- öPöÖ÷Áö®.

C»Á'' Eöhj Ä

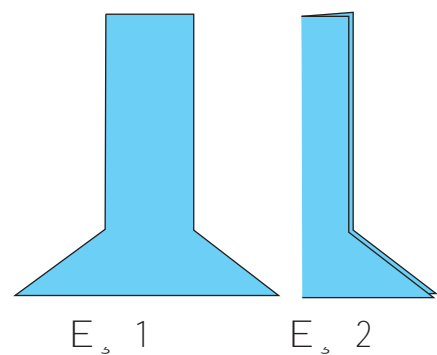


÷ ⊙ ÷ » ² Ò Í E\_s 1 CÀ JBÖhöÚöBÖ öEö, çuUTi - Cµs k  
 ESvPÍ öUS® J\_s ÷Pök ©özvµ® Es k. E\_s 2, 3, 4 BQ- ÁØÖÀ  
 JÆ÷Á ö° E\_s Á ¾® JBÖhöÚöBÖ öEö, çuUTi - Cµs k  
 ESvPÍ öUS® JBÖUS ÷ ⊙ ÷ Emh ÷Pök PÒ EÖÍ Ú.

**ö\ØEök 1**

**Æi 1** -- C[S upi Emk ÒÍ E\_s 1 I z  
 v\_z uöÍ À Áøµçx öÁmi  
 GkUP.

**Æi 2** -- öÁmi ö\_k zu E\_s øÁ E\_s 2  
 CÀ EÖÍ ÁöÖ JB÷ÖöhöBÖ  
 öEö, çx ⊙ öÖ Cµs k \ ⊙ ES  
 vPÍ öS® ÁøP° À ©i UP.

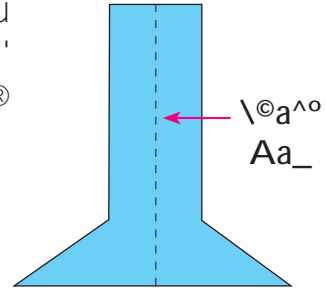


**Æi 3** -- ©i i | U ÷Pömøh | ÒÍ U ÷PöhöP Áøµçx AÆÄ\_s øÁ  
 E ⊙ x A " α - ö\ " | zuPzv À Jmk P.

J\_s uÍ Ä\_s ÁöÚx ÷ | ⊙ ÷PööhöBÖB ÁÈ ÷ - ©i i EuB %»®  
 JBÖhöÚöBÖ öEö, çuUTi - Cµs k ESvPÍ öP" α > Ek ⊙ ö° B  
 Azuí Ä\_s C\_s | øha \ ⊙ a^\_ øh - uÍ Ä\_s GÚ AøÇUP" Ek®.  
 A® ©i i | U ÷PöhöÚx AÆÄ\_s ÁB \ ⊙ a^° Aa\_ GÚ" Ek®.

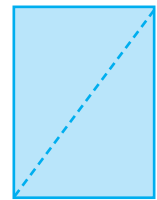


÷©ØS Ôzu ö\` ØEömi À } [ PÒ Á ø µCu  
 | ÒÎ U ÷PöhöÚx AÆÄ, Â ß ""\©a^° Aa\_''  
 GÛ'' Ek®. CÆÄ, J, \©a^° Aaø\ ©mk®  
 öPös h E, ÁöS®.



C, | ø ha \©a^° E ø h^- K° E, Â À \©a^° Aa] ß C, £UP• ®  
 E ÒÍ £Sv PÒ C µs k® Á i Á zv ¾® £µ'' £Í Â ¾® \©Ú öÚ ø Á  
 BS®.

E, Â À Pömh'' £mk ÒÍ ö\`ÆÁPzvÀ SÔUP'' £mk ÒÍ  
 | ÒÎ U ÷Pömi ß C, £UP [ PÍ ¾® J ß ÖUö Pöß Ö  
 \©Ú öÚ C, £Sv PÒ QøhUQBÓÚ. GÛ Ý® | ÒÎ U  
 ÷Pömi ß Â È ÷^- ö\`ÆÁPzøu ©i US® ÷£öx  
 A'' £Sv PÒ J ß ÖhÜößÖ ö£ö, Cuömhöx. GÛ ÷Á  
 CU ÷Pök CÆÄ, Â ß \©a^° Aa\_ AÄ».

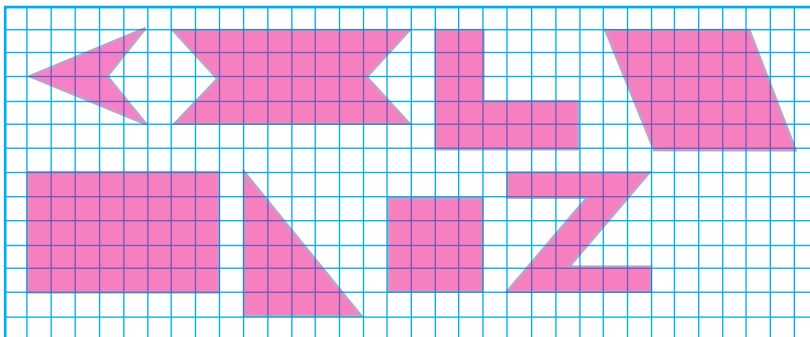


J, uÍ Ä, ø Á J, ÷Pömi ß Â È ÷^- C µs h öP'' æ > US® ÷£öx  
 AøÁ J ß Öhß J ß Ö ö£ö, Cuömhöx AU ÷Pök AÆÄ, Â ß  
 \©a^° Aa\_ ABÖ.

## 1.2 \©a^° Aa\_PøÍ ÁøµÄ

### ö\`ØEök 2

£i 1 & ·R ÷Ç Pömh'' £mk ÒÍ E, UPøÍ J, \xµU ÷Pömkz uöÍ À  
 æ µv ö\` x öÁ mi Gk UP.



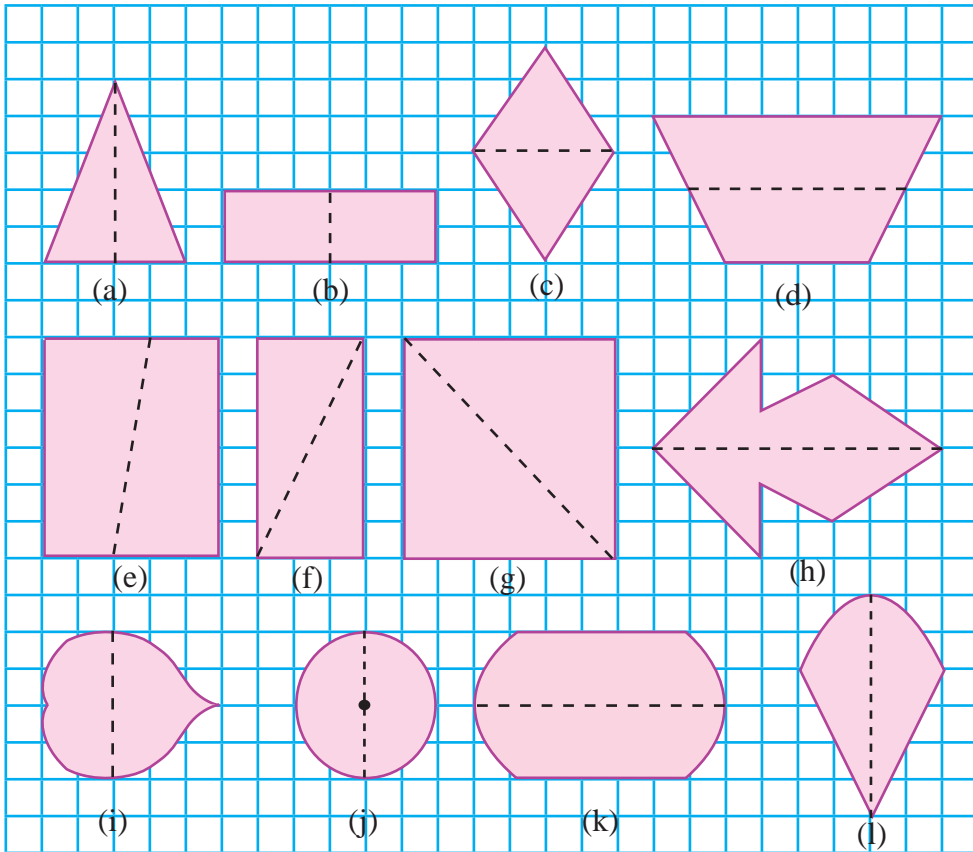
Æi 2 & ÷ © Ø S Ô zu Á ö Ö ö Ä mi ö k zu E, UPÍ ¼, ç x C, | ø ha \ © a ^, ø h ^ E, UP ø Í ÷ Á Ö ö U QU ö P ö Ö P.

Æi 3 & C, | ø ha \ © a ^, ø h ^ E, UPÍ ß G Ä » ö a \ © a ^ ö A a \_ P ø Í ^ ® Á ø µ P.

Æi 4 & ÷ © Ø S Ô zu \ © a ^ ö A a \_ P ø Í Á ø µ ç u E, UP ø Í A " x ^ ö \ | zu P z v Ä J mi J Æ ÷ Á ö ° E, Ä ß A, Q ¾ ® A u ß \ © a ^ ö A a \_ P Í ß G s o U ø P ø ^ ^ ® G Ê x P.

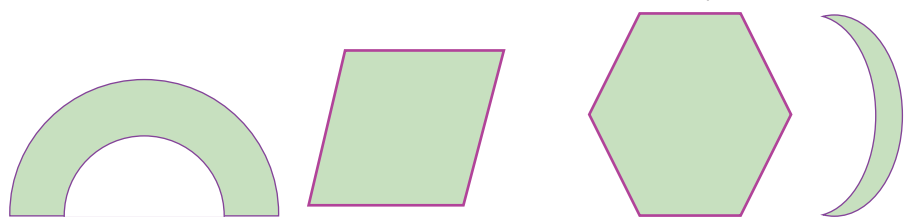
**£° Ø] 1.1**

1. R ÷ Ç P ö m h " Æ m k Ö Í E, UPÍ Ä C, | ø ha \ © a ^ ö A a \_ \ ^ ö P Á ø µ " Æ m k Ö Í E, UP ø Í z ö u ç x A ø Ä S Ô U S ® B [ Q » G Ê z ø u G Ê x P.





2. (i) R÷Ç Pömh'' Émk ÒÍ JÆÖÁö, E, Ázøu<sup>2</sup>® v\_z uóÍ À  
 µν ö\` x A Á Ø Ò ß A h°PøÍ öÁ mi ö` kzx, A Á Ø Ò ß  
 \P» C, |øha \©a^° Aa\_PøÍ <sup>2</sup>® ÁøµP.

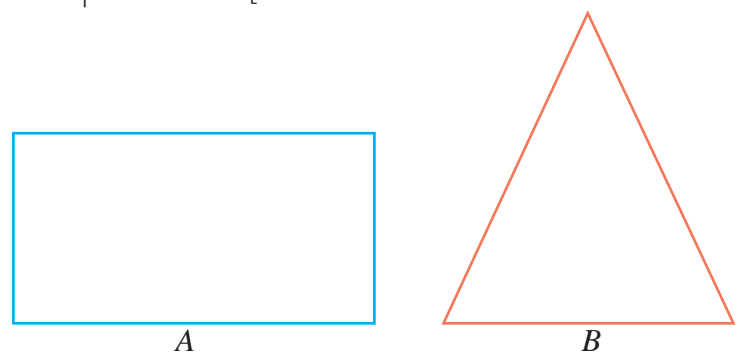


(ii) ÷©÷» \©a^° Aa\_PøÍ U öPös h E, UPøÍ E[ PÍ x  
 A `` µ` ö\` | zuPzv À Jmk P.

3. (i) R÷Ç SÔ`` µh'' Émk ÒÍ JÆöÁö, Ái Ázv Úx® A h°  
 PøÍ <sup>2</sup>® J, uóÍ À Áøµçx öÁ mi ö` kzx A Á Ø Ò ß  
 GÄ» öa \©a^° Aa\_PøÍ <sup>2</sup>® ÁøµP.

A öVEÁP Ái Á®

B C µs k ÉUP[ PÒ \©©öpÄ ÒÍ • U÷Pöo Ái Á®



(ii) ÷©ØS Ôzu JÆ÷Á ö° E, Á 3/4® \©a^° Aa\_PÍ ß  
 Gs o UøPø` GÉ xP.

(iii) ÷©÷» öÉØÓ A, B BQ` Ah°PøÍ a Cøn `` Éuß %o»®  
 |v` öuö, \©a^° E, øÁ Aø©zx AuøÚ E[ PÍ x  
 A `` µ` ö\` | zuPzv À Jmk P.



4. C [ S upi Emk ÒÍ T ØÖPøÍ A " x - ò\ " | zuPzvÀ x μν ö \ x  
 A Á ØÖÀ \ - öÚ Á ØÖß Gv ÷ μ "✓" GB Ó A ø h - öí zø u<sup>2</sup> ®  
 xø Ç - öÚ Á ØÖß Gv ÷ μ "x" GB Ó A ø h - öí zø u<sup>2</sup> ® C k P.  
 (i) C , | ø h a \ @a^, ø h - K° E , Ä À \ @a^ A a] β  
 C μ s k EUP[ PÍ ¾® E ÒÍ C , E S v PÐ ® Á i Á z v ¾®  
 E μ E Í Ä ¾® \ @öÚ ø Á B S ®.  
 (ii) C , | ø h a \ @a^ μ ö Ú K° E , Ä À J β Ö Ø S ® ÷ @Ø E m h \ @a^  
 A a\_PØ E ÒÍ \ @u° E [ PØ E ÒÍ Ú .  
 (iii) Á m h A h ö μ ö β Ö U S > - \ @a^ A a\_PÍ β G s o U ø P ,  
 \ x μ A h ö μ ö β Ö U S > - \ @a^ A a\_PÍ β G s o U ø P° ¾®  
 E ö° U P U T i - x .  
 (iv) C , | ø h a \ @a^ μ ö Ú K° E , Ä U S C , U P z u U P A v T i -  
 \ @a^ A a\_PÍ β G s o U ø P J β Ö B S ®.  
 (v) J° C , | ø h a \ @a^ E ÒÍ E , ø Á J , \ @a^  
 A a] β Á È ÷ - ö Á m i C , E S v PÍ ö P ÷ Á Ó ö U S ® ÷ E ö x  
 ö E Ó E k ® J Æ ö Á ö , E S v <sup>2</sup> ® C , | ø h a \ @a^ μ ö Ú x  
 B S ®.

### 1.3 C , | ø h a \ @a^ , ø h - uí Ä , U P ø Í A ø zu Ä

**ö\ - Ø E ö k 3**

**Ei 1** -- HuöÁ x Á i Á ® ö Pös h J , uöÖ, Pzu > U  
 ÷ PöÄ GB E Á Ø Ø Ó " ö E Ø Ö U ö P ö Ö P.

**Ei 2** -- uöø Í Ä , ® x - Á ö Ö C μ s h ö P © i U P.

**Ei 3** - © i " | U ÷ Pök ® E , Ä Ý Ò A h [ S ® Á ø P° Ä  
 Ä , " E @ ö Ú J , Á i Á z ø u Á ø μ P.

**Ei 4** - Á ø μ @ u E , ø Á ö Á m i ö - k U P.

**Ei 5** - ö Á m i ö - k z u E , ø Á Ä > U P.

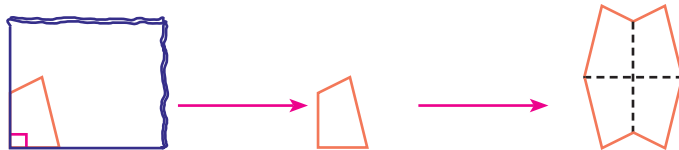


÷©ØEi ö\`ØEömi ß CÖv° Ä, C, |øha \©a^, øh` K° E, öEÖ` Ek®. AÆÄ, ÄÄ Bµ®Ezvä uøÍ ©i zu ÷Pök \©a^° Aa\öP Aø©QBÓx.

**ö\`ØEök 4**

**Ei 1** - ÷©¾ö ©ö, uøÍ Gk zx J, ö\ [ ÷Pön %ø» öEÖ` Ek®öÖ C, uhøÁPÖ ©i UP.

**Ei 2** - Aaö\ [ ÷Pön %ø» ²® EmEk®öÖ K° E, øÁ Áøµçx öÁ mi Gk UP. A uø Ú Ä > `` £uß %ø» ® ©i `` | U ÷Pök PÖ ÄË ÷` Cµs k \©a^° Aa\_PøÍ U öPös h K° E, øÁ `` öEÖP.

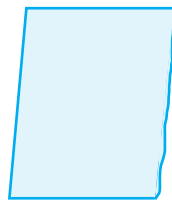


**Ei 3** - CÆÄöÖöP £Ä÷ÁÖ \©a^° E, UPøÍ öÁmi GkUP.

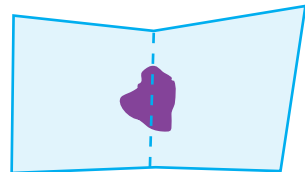
**ö\`ØEök 5**

**Ei 1** - J, uøÖ, ] Öuí Ä { Ó` §a\_ GB £Á Øø Ó` öEÖÖU öPöÖP.

**Ei 2** - uøÍ Ä, ®x` Á öÖ C µs h öP ©i zx U öPöÖP.

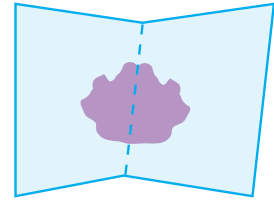


**Ei 3** - ©i zu uøÍ Ä > zx A uß J, £Sv° Ä ©i `` | U ÷Pök® Ah[S®öÖ A, ÷P J, xÍ { Ó` §aø \ C k P.



**Ei 4** - «s k® uøÍ ©i `` | U ÷Pömi ß ÄË ÷` ©i zx |ßÖöP AË zxP.

**Æi 5** - uöø Í « s k ® Å » UP.



÷ © Ø S Ô zu Æi • ø Ó P Í ß C Ö v ° À C , | ø ha \ © a ^ , ø h ^ - K ° E , ö E Ó " Æ k ® .

**Æi 6** - ÷ © Ø S Ô zu Á ö Ö Æ Å ÷ Á Ö { Ó [ P ø Í ² ø h ^ { Ó " § a \_ P ø Í " Æ ^ - ß Æ k z v A Å » x { Ó " § a ] ß A Í ø Á A Å » x A Ê z x ® • ø Ó ø ^ - © ö Ø Ö ÷ © ¾ ® C Æ Á ö Ó ö Ú E , UP ø Í " ö Æ Ö P .

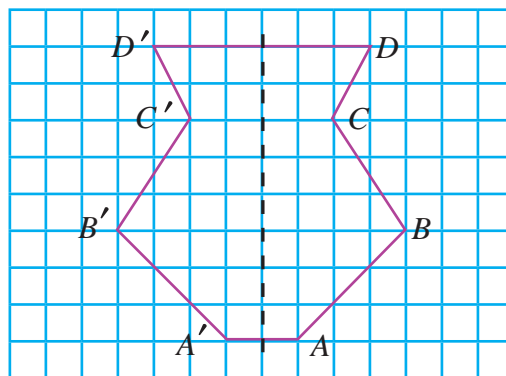
### J"Æøh

▲ uöø Í © i z x E , UP ø Í ö Á mi ² ® { Ó " § a ø \ C mk z uöø Í © i z x ® ÷ © ÷ » ö \ Ø E ø k P Í À u ^ ö zu Á ö Ö Æ Å ÷ Á Ö C , | ø ha \ © a ^ , ø h ^ - u Í E , UP ø Í A ø © UP .

▲ A ø © zu \ © a ^ ° E , UP ø Í " Æ ^ - ß Æ k z v A Ç Q ^ - \_ Á ° A » [ P ö mü © ö ß ø Ó BUSP .

## 1.4 C , | ø ha \ © a ^ , ø h ^ - u Í Ä , UP ø Í Á ø mü Ä

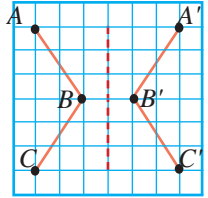
C [ S ü mü " Æ mk Ö Í \ x mü U ÷ P ö mk z u ö Í À Á ø mü " Æ mk Ö Í \ © a ^ ° E , ø Á P , x ÷ Á ö ® .



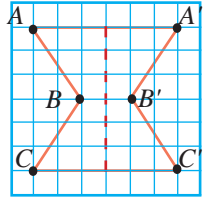




**Ει 4 --** | ÒÎ U ÷Põmi ß Á» x ΕUPzvÄ  
 C'' | ÒÎ PÐ US J zu | ÒÎ PøÍ U SÔzx  
 AÁØøÓ **A', B', C'** GÚ'' öÉ⁻ > mk **A', B' BQ⁻**  
 | ÒÎ PøÍ ²® **B', C'** BQ⁻ | ÒÎ PøÍ ²®  
 • ø Ó ÷⁻ C ø n UP.



**Ει 5 --** A, A' BQ⁻ | ÒÎ PøÍ ²® C, C' BQ⁻  
 | ÒÎ PøÍ ²® ÷ | °U ÷Põmkz xs h [ PÎ ÚôÄ  
 Cøn UP.

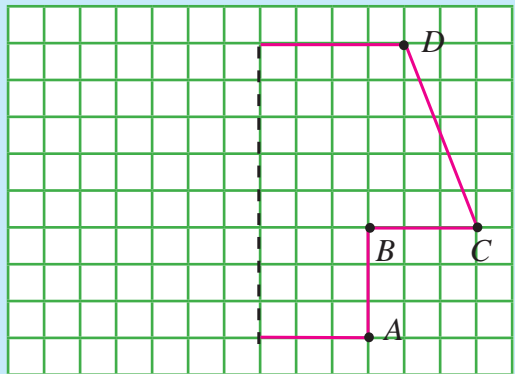


C'' ÷Éõx | ÒÎ U ÷Põmøha \©a^° Aa\øPU öPõs hx® SÔzu  
 | ÒÎ PøÍ E a] PÍ øPU öPõs hx ©øÚ C, | ø ha \©a^° E, J ß Ö  
 öÉÓ'' Émk ÒÍ x.

÷©ØSÔzu És | PøÍ'' É⁻ ßÉkzv \©a^μøÚ E, Á [ PøÍ  
 Á ø μ² ® Á u® ΕØÔ B μó' ÷Á ö®.

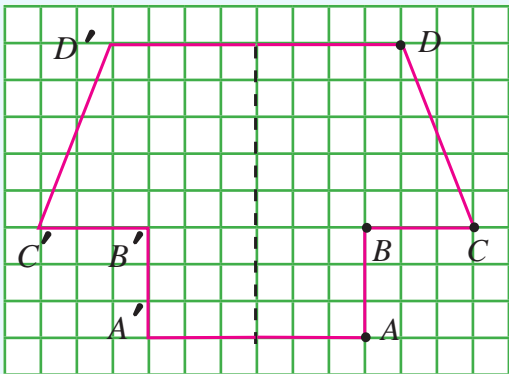
**Euõμn® 1**

| ÒÎ U ÷Põmi ÚôÄPõmh'' Ém  
 k ÒÍ ÷PõhøÚx \©a^° Aa  
 \øS® ÁøP° Ä C, | ø ha  
 \©a^, øh⁻ E, Ázøu''  
 Σμn'' Ék zx P.





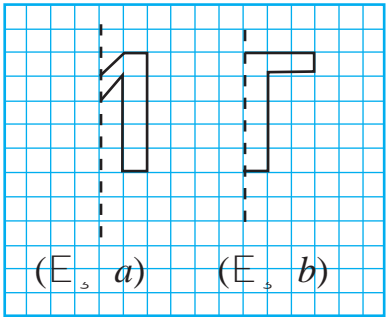
$A, B, C$  ¼,  $\text{C}x \setminus \text{C}a^\circ$   $Aa_U$   
 $S\text{O}\hat{I}$   $y\mu^\circ$  3  $A \gg SP\text{D}$   $USa$   
 $\setminus \text{C}\hat{U}\text{S}^\circ$ .  $G\hat{U} \div \hat{A}$ ,  $\setminus \text{C}a^\circ$   
 $Aa] \frac{1}{4}$ ,  $\text{C}x$  3  $A \gg S$   $y\mu z v \hat{A}$   
 $A, B$   $C\text{O}S$   $Jzu$   $\hat{I}$   $\hat{O}\hat{I}$   $P\hat{I}$   $\text{o}\hat{U}$   
 $A', B'$   $I$   $US\hat{O}$   $\div \text{E}\hat{o}^\circ$ .



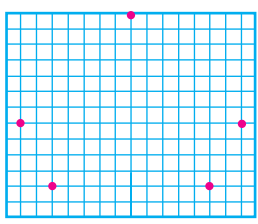
$A\hat{E}\hat{A}\hat{o} \div \hat{O}$  7  $A \gg SP\hat{O}$   $y\mu z$   
 $v \hat{A}$   $C$   $C\text{O}S$   $Jzu$   $\hat{I}$   $\hat{O}\hat{I}$   $\text{o}\hat{U}$   
 $C'$   $I$   $^\circ$  5  $A \gg SP\hat{I}$   $B$   $y\mu z$   
 $v \hat{A}$   $D$   $C\text{O}S$   $Jzu$   $\hat{I}$   $\hat{O}\hat{I}$   $\text{o}\hat{U}$   $D'$   $I$   $^\circ$   $S\hat{O}zx$   $C\text{o}n$   $\text{E}u\beta$   $\%_0 \gg$   $^\circ$   
 $C$ ,  $\hat{I}$   $\text{o}ha$   $\setminus \text{C}a^\circ \mu\text{o}\hat{U}$   $K^\circ$   $E$ ,  $\text{o}\hat{E}\hat{O}$   $\text{E}k^\circ$ .

**E° Ø] 1.2**

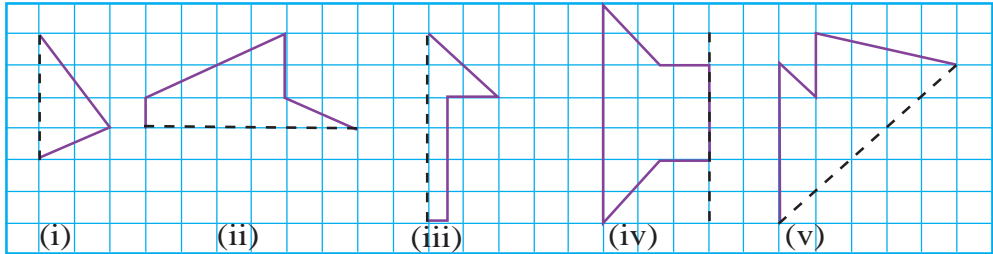
1. (i)  $u\mu^\circ$   $\text{E}mk\hat{O}\hat{I}$   $E$ ,  $a$   $I$   $\setminus x\mu U$   
 $\div P\hat{o}mk$   $zu\hat{o}\hat{O}$   $\text{o}P\hat{o}s$   $h$   $A$   $\text{C}^\circ$   $\text{o}\hat{l}$   
 $\hat{I}$   $zuPzv \hat{A}$   $\text{C}^\circ \mu v \text{o} \setminus x$   $\text{o}P\hat{o}\hat{O}P$ .
- (ii)  $\hat{I}$   $\hat{O}\hat{I}$   $U$   $\div P\hat{o}mi$   $\hat{U}\hat{o}\hat{A}$   $P\hat{o}mh^\circ$   
 $\text{E}mk \hat{O}\hat{I}$   $\setminus \text{C}a^\circ$   $Aa] \beta$   $\ll x$   $J$ ,  
 $u\hat{l}$   $\hat{A}\hat{o}i$   $\text{o}^\circ$   $\text{o}\hat{A}zx$   $\setminus \text{C}a^\circ \mu\text{o}\hat{U}$   $K^\circ$   
 $E$ ,  $\text{o}\hat{A}$   $\text{E}\hat{o}^\circ UP$ .
- (iii)  $\setminus \text{C}a^\circ \mu\text{o}\hat{U}$   $E$ ,  $\text{o}\hat{A}$   $\S \mu n$   $\text{C}\hat{o}P$   
 $\hat{A}\text{o}\mu P$ .
- (iv)  $\div \text{C}\hat{O}S$   $\hat{O}zu\hat{A}$   $\text{o}\hat{O}\hat{O}\hat{U}$   $A \div u$   $\text{E}i$   $\cdot$   $\text{o}\hat{O}^\circ$   $\hat{A}$   $C$ ,  $\hat{I}$   $\text{o}ha$   $\setminus \text{C}a^\circ \mu\text{o}\hat{U}$   
 $E$ ,  $b$   $I$   $^\circ$   $\S \mu n$   $\text{E}k$   $zx$   $P$ .



2.  $\setminus x\mu U$   $\div P\hat{o}mkz$   $u\hat{o}\hat{I}$   $\hat{A}$   $S\hat{O}UP^\circ$   $\text{E}mk\hat{O}\hat{I}$   
 $\hat{I}$   $\hat{O}\hat{I}$   $P\hat{O}$   $Ea]^\circ$   $\hat{I}$   $\hat{O}\hat{I}$   $P\hat{I}$   $\text{o}P\hat{A}$   $\mu zuUPu\hat{o}P$   $\setminus \text{C}a^\circ$   
 $E$ ,  $\text{o}\hat{A}\hat{o}\beta\text{o}\hat{O}$   $\hat{A}\text{o}\mu\text{C}x$   $Au\beta$   $\setminus \text{C}a^\circ$   $Aa\text{o}$   $\setminus \text{C}^\circ$   
 $\hat{A}\text{o}\mu P$ .



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