

ÁÐ³òÕÑº²×ºμÄÓŦ·¿ØÖÆÆ÷ºÍËũÃÇμÄ×  
‘Ì¬¡ËËÇÒª²âÊÔ¡¢ÄäÖÃ»ðÖØÐÂÐ£×¼¿ØÖÆÆ÷£-ÇëÔÚÁÐ±íÖÐμ¥»÷ËüμÃÃû³Æ£-Ê»ºóμ¥»÷¡ºÊðÐÔ¡±¡£

μ¥»÷'Ë'!¿ÉÍí¼ÓÐÂμÄÓÏ·¿ØÖÆÆ÷j£

,üÐÃÏÔÊ¾ÔÚ¡°ÓÏ·¿ØÖÆÆ÷¡±ÁÐ±íÖÐµÄÐÃÏø£

É¾ÿÑ¡µÄÖÏ·¿ØÆÆ÷¡£

μ¥»÷'Ê'!¿É²âÊÔ¡¢ÃäÖÃ»òÐ£×¼,ÃÓÏ·¿ØÖÆÆ÷¡£

ÁÐ³õÒÑº²×ºÔÚ,Ã¼¼ÆËã»úÉÌµÄÃ¿,öÓÏ·¿ØÖÆÆ÷µÄ¿ØÖÆÆ÷±êÊ¶·û¼û  
¿ÉÒÔ,ü,Ä·ÖÀã,øÃ¿,öÓÏ·¿ØÖÆÆ÷µÄ±êÊ¶·û¼û

ÁĐ³ôÕÑº²×ºÔÚ,Ã¼/₄ÆĚă»úÉİμĂÓİİ·¿ØÖÆÆ÷j£

ÁÐ³ö¿ØÖÆÆ÷±êÊ¶·ûÒÔ¼°·ÖÃä,øÃ¿Ô»±êÊ¶·ûµÄÓï·¿ØÖÆÆ÷|£



μ¥»÷'É'¿É,ü,Ä·ÖÅä,øÑ¿¶·±êÊ¶°ÅμÄÓŒ·¿ØÖÆÆ÷¿£

Ö,Ŧ"ÓŦ"·¿ØÖÆÆ÷ŦË¿ÚË"Èç¹ûÐèÒªμÄ»°£©ËùÓÃμÄŦË¿Ú¿£

ÔÊĐÍÆäËûÉè±,£`Èçμ÷ÖÆ½âμ÷Æ÷£©ÖĐ¶ĭĭÓĭĭ·¿ØÖÆÆ÷μÄ²Û×÷ĭ£μ«ÊÇ£¬ÑĭÖĐ,Ã,  
´Ñĭ¿ò»áμ¼ÖÃÓĭĭ·¿ØÖÆÆ÷³ðĭÖÒ»¶ĭμÄ·´ÓĭÑÓ³Ûĭ£  
Èç¹ûÓĭĭ,ËÔÚÓĭĭ·ÖĐ¹×÷²»ÖýË·£¬ÇèÇâ³ý,Ã,´Ñĭ¿òĭ£  
Èç¹ûÔÚÍæÁª»úÓĭĭ·Ê±μ÷ÖÆ½âμ÷Æ÷¹×÷²»ÖýË·£¬»ðÔÚÊ¹ÓÃÓĭĭ·¿ØÖÆÆ÷Ê±·£ÉúÁËÍøÂç»ðÆäËûÓ²¼pĭÊĭâ£¬Çè  
ÑĭÖĐ,Ã,´Ñĭ¿òĭ£

Í¬Ê±°`ÀàĐÍ£``ÀýÈçÁ½,ö°`Â¥µÄ·ÉĐĐ²Ù×Ý,Ě£©°Í²úÆ·Ăû³Æ£``ÀýÈç Microsoft SideWinder 3D

Pro£©ÁĐ³òÓĬ·¿ØÖÆÆ÷¿£Èç¹û¿ÉÄÜ£¬ÇěÑ¿ÔñÓĬ·¿ØÖÆÆ÷µÄ²úÆ·Ăû³Æ¿£

Èç¹ûĬ

`ÁĐ³òÓĬ·¿ØÖÆÆ÷µÄ²úÆ·Ăû³Æ»òÀàĐÍ£¬Çěµ¥»÷¿ĬÍ¼¼ÓÆäËü¿±ÒÔ²×°ÆäÇý¶Ĭ³ĬĐò£¬»òµ¥»÷¿×Ô¶ĬĬÒå¿±ÒÔÖ,¶ĬĬ

ÓĬ·¿ØÖÆÆ÷µÄİØĐÔ¿£

Èç¹úÓŒ·çØÖÆÆ÷ŦÁĐ³öÇÒĂúÓĐ°²×°ĂİÆ¬Çëμ¥»÷´Ě´|;ĚÔÚĬÂÒ»,öŦŦÔ»°çòÉİÆ¬μ¥»÷;ı°Ó´ĂĂİ°²×°ı±Ě¬È»°ó°  
´ŦŦÆĀĂ»İăÊ¾²Û×÷;ıĚ

Èç¹úÓŒ·¿ØÖÆÆ÷Î´ÁĐ³òÇÒĂúĂ»ÓĐ°²×°ĀĬ£¬Çëμ¥»÷´Ě´ĬĬ£¿ÉÖ,Œ´¿ØÖÆÆ÷μĀĬØĐÔĬ£

Ö,¶"ÓŦ·¿ØÖÆÆ÷ÖáµÄÊýÄ¿i£¾4i¹ÜÓÐÀýÍâ£¬Á½ÖáÓŦ·¿ØÖÆÆ÷Í"³£  
¿ÉÒÔÉŦŦÂ°í×óÓÒÒÆ¶\_j£ÊýÖáÓŦ·¿ØÖÆÆ÷Í"³£°ü°¬½ÚÁ÷·§¿ØÖÆj£ÊÄÖáÓŦ·¿ØÖÆÆ÷ÔðÍ"³£  
°ü°¬½ÚÁ÷·§Í·½Ïð¶æj£

Ö,¶ÖÏ·¿ØÆÆ÷°Å¥µÄÊýÄ¿iE



Ö,¶"ÈùÉèÖÃÓŦ·¿ØÖÆÆ÷μÄÄàĐÍ;£

Ö,¶"ÄúÓÐÒ»„öÓÃ×÷·ÉÐÐ¿ØÖÆÆ÷/,ËμÄÓŦ·¿ØÖÆÆ÷¡£

Ö,¶"ÄúÓÐÒ»,ö¿É³°Ë,ö·½ïðÒÆ¶μÄ`¥Ãþ¶"ïðÓï·¿ØÖÆÆ÷¡£,ÃÀàÐíμÄÓï·¿ØÖÆÆ÷í³£ÓÐÁ½,ö»ðËÄ,ö°Ä¥¡£

Ö,ŦÖŦ·¿ØÖÆÆ÷ÓÐ·½İòÂİ;¢ÓİÃÅ°İÉ<sup>23</sup>μ½Âİ°âİ£

Ö,Ŧ"ÓŦ"·çØÖÆÆ÷ÓÐÊÓμă (POV) Í·çøj£POV ÄÜÈÃÄúÖ,Ŧ"ă¯ÀÀÆÁÄ»ŦŦåμĂŦ»ÖÃ°í·½Ŧðj£

¿ÉÔÚĚ

‘|ÊäÈë×Ô¶”ÒåÓĬ.¿ØÖÆÆ÷μĂĂŭ³Æ¡£,ĂĂŭ³Æ½«³öĬÖÔÚÒÑ°²×°ÔŬ¼ÆĚă»úÉĬμ¿ÉÓĂ¿ØÖÆÆ÷ÁĐ±íÖĐ¡£

Ö,ŦıçØÖÆÆ÷ÊÇÓŦı,Ëı£

ïÔÊ¾¿É·ÖÄä,øÑ¡¶´Óï·¿ØÖÆÆ÷μÄ±êÊ¶°Å¡£μ¥»÷¼¿ýí·ÒÔ,ü,Ä¿ØÖÆÆ÷±êÊ¶°Å¡£  
ÓÐÐ©Óï·ÒªÇóÓï·¿ØÖÆÆ÷μÄ¿ØÖÆÆ÷±êÊ¶°Å¡ª 1¡£



ïÔÊ¾Ñ;¶·¿ØÖÆÆ÷±êÊ¶°Å;£ÊÇÒªª,Ã±êÊ¶°Å·ÖÅäÓ¶·¿ØÖÆÆ÷£¬ÇèÔÚ°Ó¶·¿ØÖÆÆ÷±ÁÐ±íÖÐµ¥»÷,Ã¿ØÖÆÆ÷µÃÃû³Æ;£

ÁÐ³ö¿ÉÓÃµÄÖÎ·¿ØÖÆÆ÷¡£

ïÔÊ¾Öá 1 °Í Öá 2 ·½ïðμÄÒÆ¶·¶Î§îÊÈçÒªÔÚÖá 1 °Í Öá 2£¶³£ÊÇ X Öá°Í Y  
Öá£©·½ÏðÐ£×¼ÖÏ·¿ØÖÆÆ÷μÄÒÆ¶·¶Î§£¬Çë°í°Ð£×¼ÐÃ¶±ÇøÓðμÄÏáÊ¾¼²Û×÷î£

ïÔÊ¾Öá 3 ·½ïðμÄÒÆΠ·¶Î§¡£ÈçÒªÓÚÖá 3 ·½ïðÐ£×¼ÓÏ·¿ØÖÆÆ÷μÄÒÆΠ·¶Î§£¬Çê°¡°Ð£×¼ÐÃï£  
¡±ÇøÓðμÄÏáÊ¾²Ü×÷¡£

ĩÔÊ¾Öá 4 ·½ìòµÄÒÆ¶·¶îſî£ÊËçÒªÔÚÖá 4 ·½ìòÐ£×¼Óſ·¿ØÖÆÆ÷µÄÒÆ¶·¶îſ£-Çë°ì°Ð£×¼ÐĀĩ¢  
j±ÇøÓòµĀĭăÊ¾²Û×÷j£

ĩÔÊ¾Öá 5 ·½ìòμÄÖÆ¶·¶îſî£ÊËçÒªÔÚÖá 5 ·½ìòÐ£×¼Óſ·¿ØÖÆÆ÷μÄÖÆ¶·¶îſ£-Çë°î°Ð£×¼ÐĂĩ¢  
j±ÇøÓòμĂĩáÊ¾²Û×÷j£

ĩÔÊ¾Öá 6 ·½ìòμÄÖÆ¶·¶îſî£ÊËçÒªÔÚÖá 6 ·½ìòÐ£×¼Óſ·¿ØÖÆÆ÷μÄÖÆ¶·¶îſ£-Çë°î°Ð£×¼ÐĂĩ¢  
j±ÇøÓòμÄîáÊ¾²Û×÷j£

ÉïĀ×óóòòÆſ̄Ê±ïôÊ¾Êóμă (POV) Í·çμĀĬ»ÖĀĭ£ĒçÒªĐ£×¼ÓĬ·çØÖÆÆ÷μĀ POV Í·çø£¬çĕ°ĭ°Đ£×¼ĐĀĭ¢  
ĭ±ÇøÓòμĀĬăÊ¾²Û×÷ĭ£



Ö,¶"ÓŦŦ·¿ØÖÆÆ÷ÓÐ·½ŦŦæ»ð½ÄŦ°â£¬»ðÊÇ,½¼ÓÁËμ¶ŦÄμÄ·½ŦŦæ»ð½ÄŦ°â£µ¶»÷'Ë'ÒÔÈ·±  
£·½ŦŦæ»ð½ÄŦ°â½«ÔÚÓŦŦ·ÖÐ¹¤×÷¡£



ïÔÊ¾Öá 1 °Í Öá 2 ·½ïðμǺÒÆ¶·¶î§î£ÈçÒªÔÚÖá 1 °Í Öá 2£í³£Êç X Öá°Í Y  
Öá£©·½ïðÐ£×¼Óï·¿ØÖÆÆ÷μǺÒÆ¶·¶î§£¬Çë°í°Ð£×¼ÐǺ¶î±ÇøÓðμǺìáÊ¾²Ù×÷î£

ĩÔÊ¾Öá 3 ·½ìòμÄÖÆ¶·¶îſî£ÊËçÒªÔÚÖá 3 ·½ìòÐ£×¼Óſ·¿ØÖÆÆ÷μÄÖÆ¶·¶îſ£-Çë°î°Ð£×¼ÐĂĩ¢  
j±ÇøÓòμÄîáÊ¾²Û×÷j£

ĩÔÊ¾Öá 4 ·½ìòµÄÒÆ¶·¶îſî£ÊËçÒªÔÚÖá 4 ·½ìòÐ£×¼Óſ·¿ØÖÆÆ÷µÄÒÆ¶·¶îſ£-Çë°ì°Ð£×¼ÐĀĩ¢  
j±ÇøÓòµĀĭăÊ¾²Û×÷j£

$$\tilde{A}^{\epsilon} \tilde{E}^{\delta} D^{\epsilon} x^{1/4} \tilde{U}^{\epsilon} \div \mu \tilde{A}^{\epsilon} \tilde{U}^{\delta} \tilde{O}^{\epsilon} \tilde{E}^{\delta}$$

zâÊÔÖá 1 °í 2 ·½lòµÄÒÆ¶·¶lŒjEÇë³¢ÊÔµ½´²âÊÔ¿òµÄËÄ½ÇiEËÇ¹ùÖá 1 °íÖá 2  
lìÓl²»ÖýË·£¬ÇëÖÐÄÐ£×¼Ól·¿ÖÖÆÆ÷i£

²âÊÔÖá 3 ·½ïðµÄÒÆ¶·¶Î§¡£Çë³¢ÊÔÓǺÓŦ·¿ØÖÆÆ÷ÊĭµÄÖá¿ØÖÆÆ÷µ½´²âÊÔ¿ðµÄ¶²¿ĭµ×²¿¡£ÊË¹ûÖá 3  
ĭŦÓ¹²»ŦýÊ·£¬ÇëÖÖÐĀÐ£×¼ŦŦ·¿ØÖÆÆ÷¡£



2âÊÔÖá 4 ·½ïðµÄÒÆ¶·¶Î§i£Çë³£ÊÔµ½'i²âÊÔ¿ðµÄ¶²¿°iµ×²¿i£ÊÇ¹ûÖá 4  
ïiÓ'²»ÖýÊ·£¬ÇëÖÐÐÂÐ£×¼¼Ó¶·¿ÖÖÆÆ÷i£

2âÊÔÖá 5 ·½ïðµÄÒÆ¶·¶Î§¡£Çë³¢ÊÔµ½'¡²âÊÔ¿ðµÄ¶²¿°¡µ×²¿¡£ÊË¹ûÖá 5  
ïïÓ'²»ÖýÊ·£¬ÇëÖÐÐÂÐ£×¼¼Ó¶·¿ðÖÆÆ÷¡£

²âÊÔÖá 6 ·½ïðµÄÒÆ¶·¶Î§¡£Çë³¢ÊÔµ½´¡²âÊÔ¿ðµÄ¶²¿°¡µ×²¿¡£ÊË¹ûÖá 6  
ïïÓ¹²»ÖýÊ·£¬ÇëÖÐÐÂÐ£×¼¼Ó¶·¿ðÖÆÆ÷¡£

Èç¹ûÓŒ·¿ØÖÆÆ÷ÓÐÊÓµã (POV) Í·¿ø£-Ôð²ãÊÔËü¿£ÈçÒ²ãÊÔÊÓµã POV  
Í·¿ø£-ÇëÊŒ×óÓÒµØÖÆ¶ËËü¿£Èç¹ûŒÓ¹²»ÖýÊ·£-ÇëÖÐÐÂÐ£×¼¼ÓŒ·¿ØÖÆÆ÷¿£

²ãÊÔÓŦ·¿ØÖÆÆ÷μÄ°Å¥¡£Ã¿Ŧ°ÓŦ·¿ØÖÆÆ÷μÄÒ»‚ö°Å¥¡£°Å¥±à°ÅμÄ·ÖÅãÓÉÓŦ·¿ØÖÆÆ÷μÄÉú²úÉÌÈ·ŦŦ¡£

Ã¸Ö´ÐÐÐ£×¼ PO V Í·¸øµÄÖ»¸,ö²½ÖèÖ®°ó£¬¶¼Çëµ¥»÷´Ë´|»ð°´ Enter ¼Üj£

·μ»Øμ½Ð£×¼¹ý³îμǺÉĬŎ»²¹½î£μ±Ç°Ŏá½«±£³ŎĬ̃Ð£×¼×´Ĭ¬»ð·μ»ØŎŎÇ°μǺÐ£×¼Ŏμĭ£

l̈ø¹ýμ±Ç°Đ£×¼²¹½Öè£¬×ªμ½ĩÂÖ»‚öÖªĐ£×¼μÄ¿Ø¼₄p¡£μ±Ç°Öá½«±£³ÖĩĐ£×¼×´ĩ¬»ð·μ»ØÖÔÇ°μÄĐ£×¼Öμ¡£



Ã¿Ö´ÐÐÐ£×¼ POv Í·¿øµÄÖ»\_ö²½ÖèÖ®°6£-¶¼Çëµ¥»÷´Ë´!»ð°´ Enter ¼Üj£

·μ»Øμ½Ð£×¼¹ý³ìμÄÉÏÒ»»²½î£μ±Ç°Öá½«±£³ÖÏ´Ð£×¼×´ì¬»ð·μ»ØÒÔÇ°μÄÐ£×¼Öμî£

İø¹ýµ±Ç°Đ£×¼²½Öè£¬×ªµ½İÂÖ»,öÖªĐ£×¼µÄ¿Ø¼µİ£µ±Ç°Öá½«±£³Öİ¬Đ£×¼×´İ¬»ð·µ»ØÖÔÇ°µÄĐ£×¼Öµİ£

ïÔÊ¾¿ÉÓÃÓÚ°²×°ÐÃÓï·μÄÇý⌈Æ÷¼°Óï·¿ÉÓÃμÄ´ÅÄì¿Ö¼ä¿£ïþ·¨ÔÚ⌈ÀÖ¼μÄÇý⌈Æ÷Éï,ü,ÃÓï·ÈùÓÃμÄ´ÅÄì¿Ö¼ä°Ù·Ö±È¿£

ÔÚËùÓÐçγΓÆ÷Éï½«Óï·ζÉÓÃμÄ´ÅÄïζÖ¼ä°Û·Ö±È»¹ÔîªÄ¬ÈïÖμj£

μ÷ÕûÓŦ·¿ÉÓÃμÄ´ÅÅ!¿Õ¼ä°Û·Ö±Èj£

ĩÔÊ¾ÓÐ¹Ø´ò¿ªºíÊ¹ÓÃÓĩÒðÁÃìµÃĩêĩ,ÐÃĩ¢ĩ£

ÁÐ³òÔÚÓöÁª»úÅóÓÑÁÄìµÄí-Ê±¿ÉÒÔíæµÄÓÏí-¿£



,ÃĬÄ¼p²»ÓÃÓÚä⁻ÄÄ

