

MYARC ADVANCED BASIC

The sprite-number is a numeric-expression whose value specifies the number of the sprite assigned in the SPRITE subprogram.

The pixelrow and the pixelcol are numeric-expressions whose values specify the position of the screen pixel.

A coincidence exists if the distance between the pixel in the upper-left corner of the sprite and the screen pixel is less than or equal to the value of the numeric-expression tolerance. (Note that a coincidence also exists if any pixel in the sprite occupies the screen pixel location).

The distance between two pixels is said to be within tolerance if the difference between pixelrows and the difference between pixelcols are both less than or equal to the specified tolerance. Note that this is not the same as the distance indicated by the DISTANCE subprogram.

COINC returns a value in the numeric-variable indicating whether or not the specified coincidence exists. The value is -1 if there is a coincidence or 0 if there is no coincidence.

All Sprites

The ALL option tests for the coincidence of any of the sprites.

For the ALL option, sprites are considered to be coincident if any pixel of any sprite occupies the same screen pixel location as any pixel of any other sprite.

Also the ALL with a pixelrow,pixelcol option considers there to be a coincidence if any sprite occupies the defined screen location of pixelrow,pixelcol.

COINC returns a value in the numeric-variable indicating whether or not a coincidence exists. The value is -1 if there is a coincidence or 0 if there is no coincidence.

Program

```
100 CALL CLEAR::S$="0103070F1F3F7FFF"  
120 CALL CHAR(244,S$)::CALL CHAR(250,S$)  
130 CALL SPRITE(#1,244,7,50,50)  
140 CALL SPRITE(#2,250,5,44,42)  
150 CALL COINC(#1,#2,10,C)  
160 PRINT C  
170 CALL COINC(ALL,C)  
180 PRINT C  
RUN  
-1  
0
```

Line 150 shows a coincidence because the upper-left corners of the sprites are within 10 pixels of each other.

Line 170 shows no coincidence because the shaded areas of the sprites do not occupy the same screen pixel location. (Shaded areas are compared only if you specify the ALL option.)

Do not use when MOUSE interrupts are on (MOUSE ON).