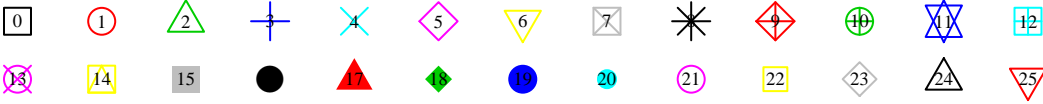


A: Plot symbols and text; specify colors and/or character expansion; draw rectangle

```
par(fig=c(0, 1, 0.415, 1))

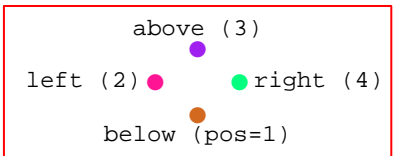
plot(0, 0, xlim=c(0, 13), ylim=c(0, 19), type="n")
xpos <- rep((0:12)+0.5, 2); ypos <- rep(c(14.5,12.75), c(13,13))
points(xpos, ypos, cex=2.5, col=1:26, pch=0:25)
text(xpos, ypos, labels=paste(0:25), cex=0.75)
```



```
## Plot characters, vary cex (expansion)
text((0:4)+0.5, rep(9*ht, 5), letters[1:5], cex=c(2.5,2,1,1.5,2))

a b c d e
```

```
## Position label with respect to point
xmid <- 10.5; xoff <- c(0, -0.5, 0, 0.5)
ymid <- 5.8; yoff <- c(-1,0,1,0)
col4 <- colors()[c(52, 116, 547, 610)]
points(xmid+xoff, ymid+yoff, pch=16, cex=1.5, col=col4)
posText <- c("below (pos=1)", "left (2)", "above (3)", "right (4)")
text(xmid+xoff, ymid+yoff, posText, pos=1:4)
rect(xmid-2.3, ymid-2.3, xmid+2.3, ymid+2.3, border="red")
```

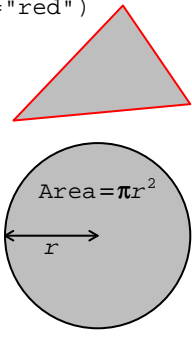


B: Triangles or polygons, circles, and mathematical text

```
par(fig=c(0, 1, 0.01, 0.40), new=TRUE)

plot(0, 0, xlim=c(0, 13), ylim=c(0, 12), type="n")
polygon(x=c(10.7,12.8,12), y=c(7.5,8,11), col="gray", border="red")

## Draw a circle, overlay 2-headed arrow (code=3)
xcenter <- 11.7; ycenter <- 4; r=1.1
symbols(x=xcenter, y=ycenter, circles=r,
        bg="gray", add=TRUE, inches=FALSE)
arrows(x0=xcenter-r, y0=ycenter, x1=xcenter, y1=ycenter,
        length=.05, code=3)
```



```
## Use expression() to add labeling information
charht <- strheight("R")
text(x=xcenter-r/2, y=ycenter-charht, expression(italic(r)))
text(xcenter, ycenter+3.5*charht, expression("Area" == pi*italic(r)^2))
```