

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

```
par(fig=c(0, 1, 0.45, 1))
```

```
plot(1, 1, xlim=c(0, 13.25), ylim=c(0.5, 18.5), type="n")
xpos <- rep((0:12)+0.5, 2); ypos <- rep(c(14,12), c(13,13))
points(xpos, ypos, cex=3, col=1:26, pch=0:25)
text(xpos, ypos, labels=0:25, cex=0.8)
```



```
## Plot characters, vary cex (expansion)
```

```
text((0:5)+0.5, rep(8, 6), letters[1:6], cex=c(3, 2, 1.5, 1.5, 2, 3))
```

a b c d e f

```
## Position label with respect to point
```

```
xoff <- c(0, -0.5, 0, 0.5); yoff <- c(-1,0,1,0)
```

```
col4 <- colors()[c(52, 116, 547, 610)]
```

```
points(11.1+xoff, 5.7+yoff, pch=16, cex=1.5, col=col4)
```

```
posText <- c("below: pos=1", "left: 2", "above: 3", "right: 4")
```

```
text(11.1+xoff, 5.7+yoff, posText, pos=1:4)
```

```
rect(9.1, 3.3, 13.1, 8.1, border="red")
```

above: 3
left: 2 right: 4
below: pos=1

B: Polygon (triangle), circle, and mathematical text

```
par(fig=c(0, 1, 0, 0.42), new=TRUE)
```

```
plot(1, 1, xlim=c(0, 13.25), ylim=c(0.4, 13.1), type="n")
```

```
## Draw a triangle
```

```
polygon(x=c(9.3,13,11), y=c(7,8,12), col="gray")
```

```
## Draw a circle, overlay 2-headed arrow (code=3)
```

```
symbols(11.1, 3.7, circles=1.0, bg="gray", add=TRUE,  
        inches=FALSE)
```

```
arrows(11.1, 3.7, 12.1, 3.7, length=.05, code=3)
```

```
## Use expressions to add labeling information
```

```
text(11.6, 3.7-0.75*strheight("R"), expression(italic(r)))
```

```
text(11.1, 5.2, expression("Area" == pi*italic(r)^2))
```

```
rect(xleft=9.1, ybottom=0.5,  
     xright=13.1, ytop=12.4, border="red")
```

