

```
{
    return length(max(abs(p)-b,0.0))-r;
}
```

Box - signed - exact

```
float sdBox( vec3 p, vec3 b )
{
    vec3 d = abs(p) - b;
    return min(max(d.x,max(d.y,d.z)),0.0) + length(max(d,0.0));
}
```

Torus - signed - exact

```
float sdTorus( vec3 p, vec2 t )
{
    vec2 q = vec2(length(p.xz)-t.x,p.y);
    return length(q)-t.y;
}
```

Cylinder - signed - exact

```
float sdCylinder( vec3 p, vec3 c )
{
    return length(p.xz-c.xy)-c.z;
}
```

Cone - signed - exact

```
float sdCone( vec3 p, vec2 c )
{
    // c must be normalized
    float q = length(p.xy);
    return dot(c,vec2(q,p.z));
}
```

Plane - signed - exact