tikzPikz

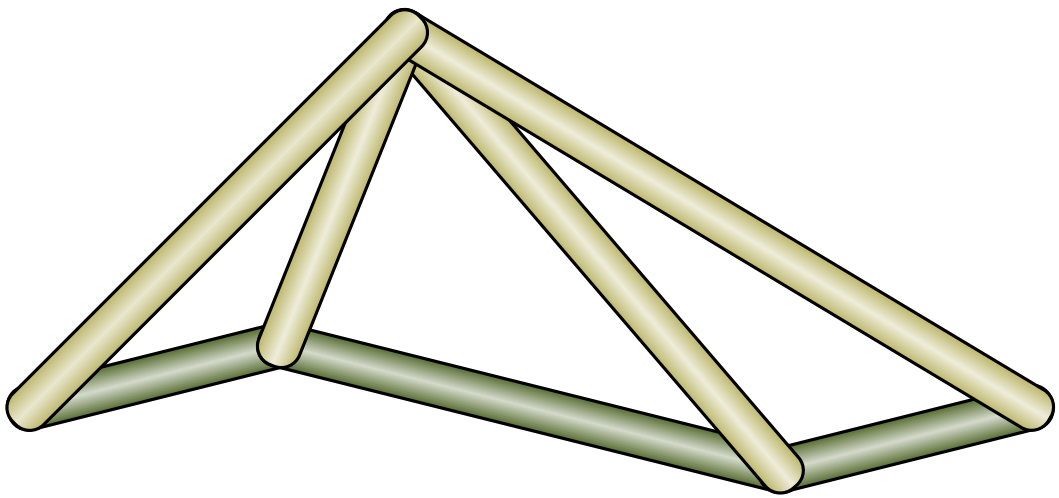
Source code at:
https://github.com/dmorgorg/LaTeX2022

Last updated on November 29, 2022

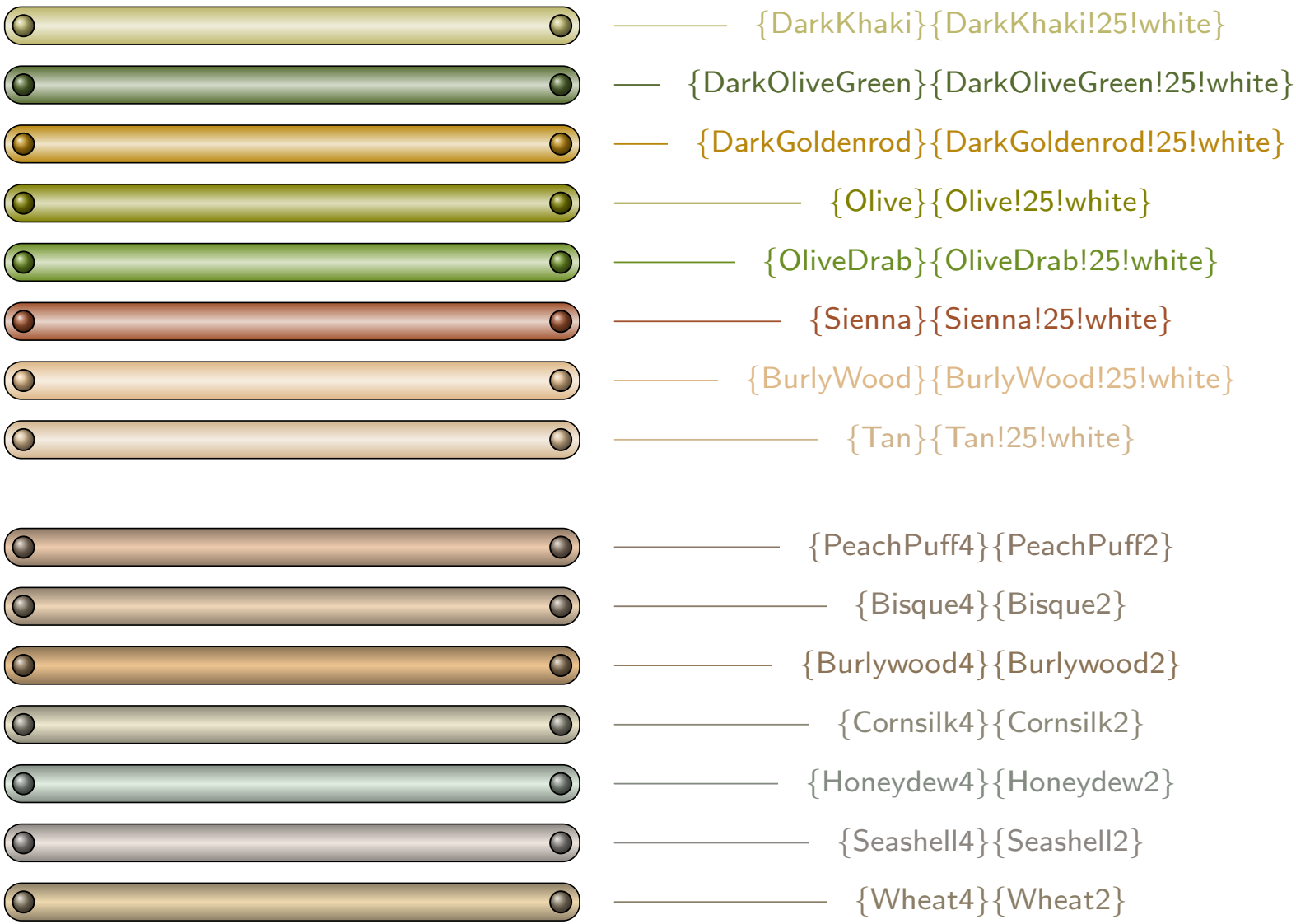
Table of Contents

Tikz Components :: Member

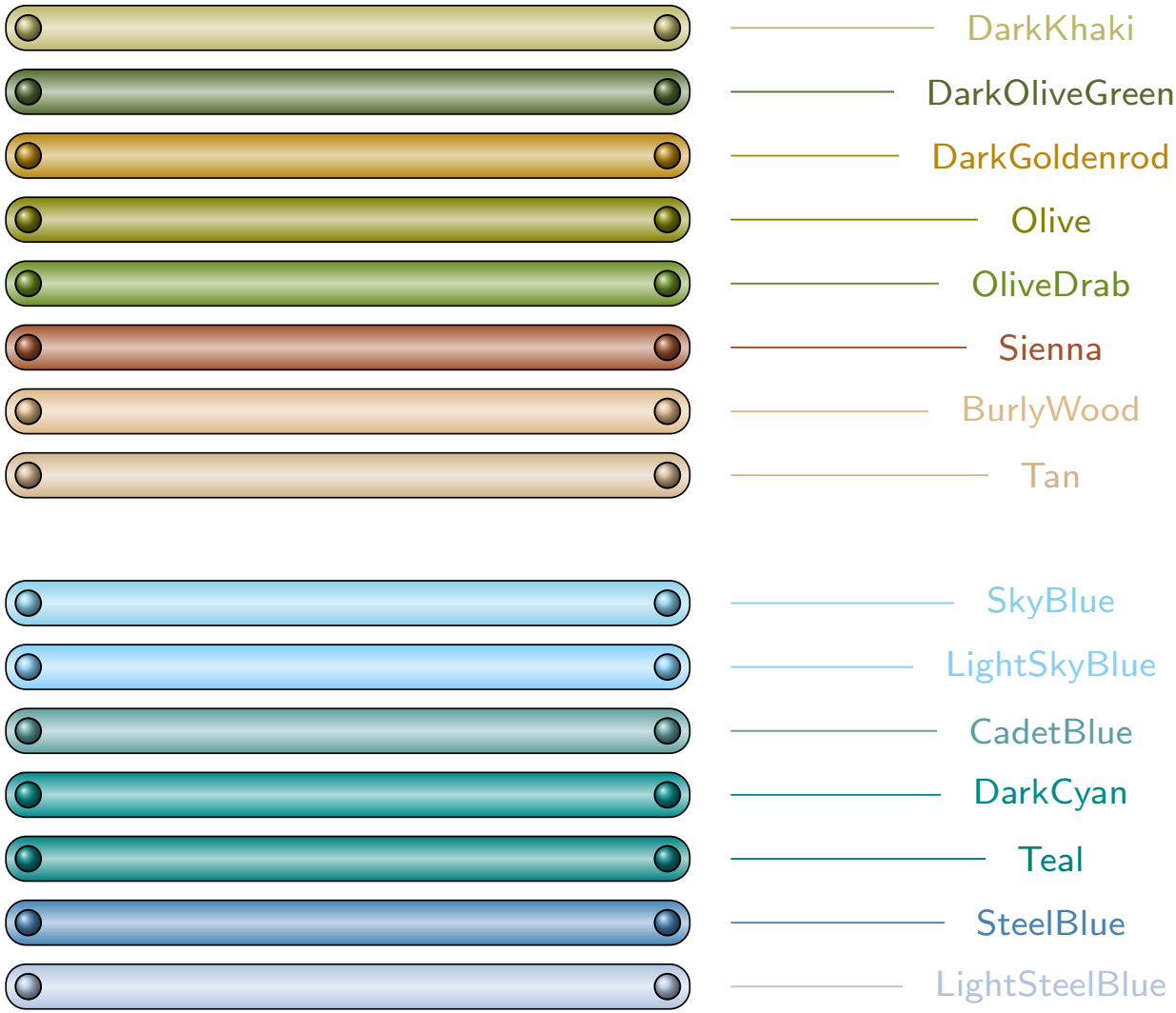
```
\Member{startpt}{endpt}{outer}{inner}{stroke}{height}{radius}{line width}
```



Tikz Components :: Some Example Member Colors

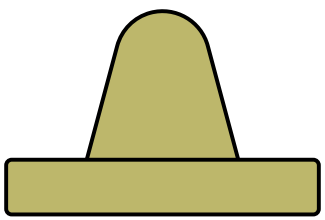


Tikz Components :: Some More Member Colors



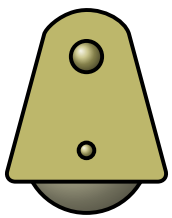
Tikz Components :: PinnedConnection

```
\PinnedConnection[rotate=0]{coordinate}{fill}{draw}{scale}{line width}
```



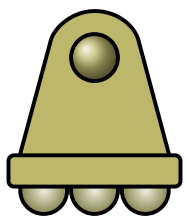
Tikz Components :: RollerOne

```
\RollerOne[rotate=0]{coordinate}{fill}{draw}{scale}{line width}
```



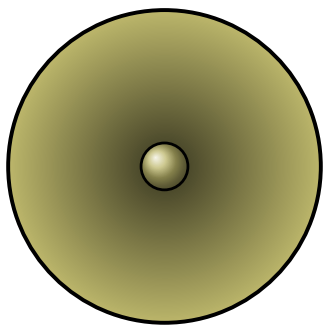
Tikz Components :: RollerThree

```
\RollerThree[rotate=0]{coordinate}{fill}{draw}{scale}{line width}
```



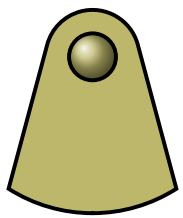
Tikz Components :: RollerOnly

```
\RollerOnly[rotate=0]{coordinate}{fill}{draw}{scale}{line width}
```



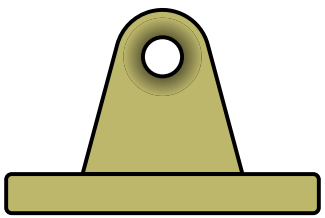
Tikz Components :: Rocker

```
\Rocker[rotate=0]{coordinate}{fill}{draw}{scale}{line width}
```



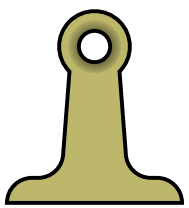
Tikz Components :: EyeConnection

```
\EyeConnection[rotate=0]{coordinate}{fill}{draw}{scale}{line width}
```



Tikz Components :: EyeConnectionB

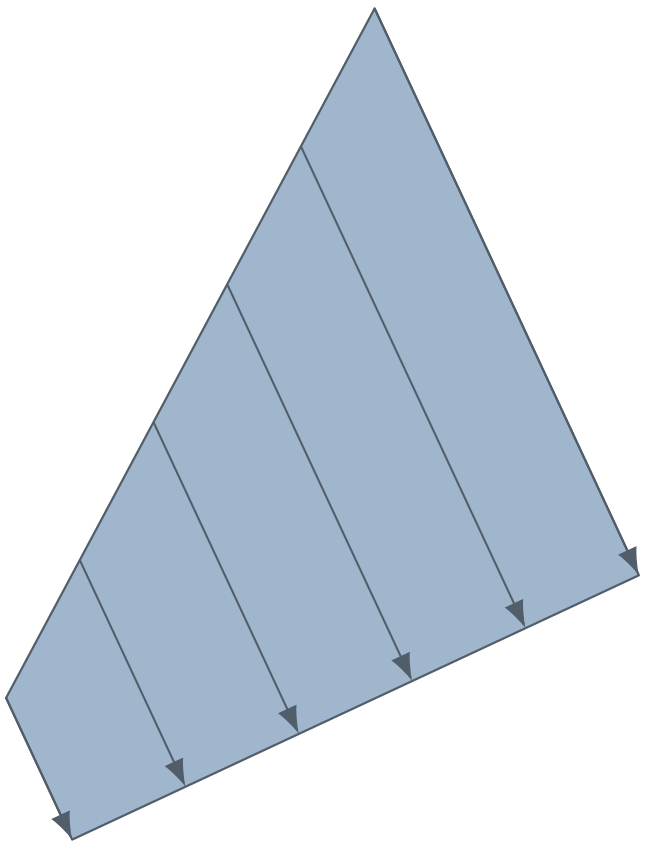
```
\EyeConnectionB[rotate=0]{coordinate}{fill}{draw}{scale}{line width}
```



Tikz Components :: DLDown

```
\DLDown[rotate]{tl}{tr}{b}{fill}{draw}{spaces}{scale}{lineWidth}
```

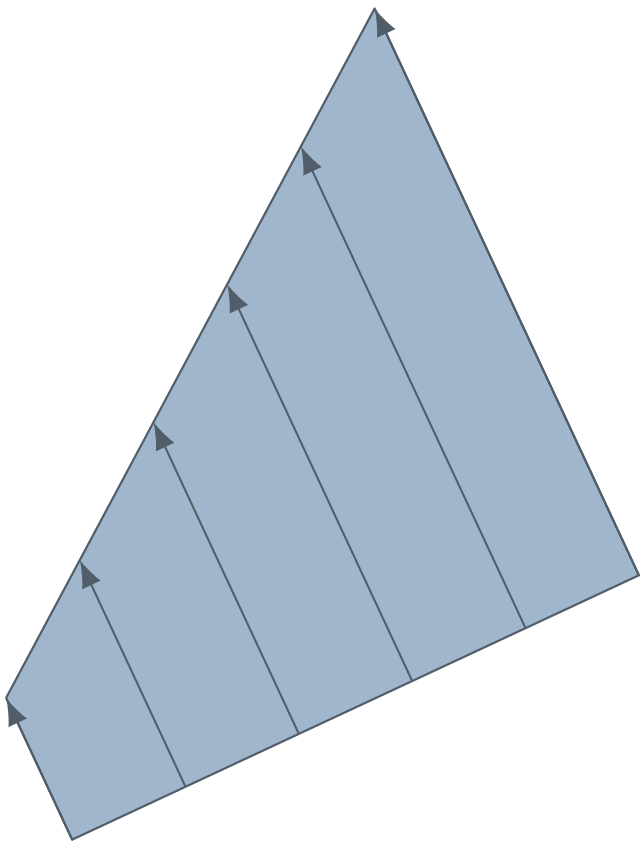
```
\DLDown[25]{A}{B}{C}{SlateGray3}{SlateGray4!75!black}{5}{1}{0.375}
```



Tikz Components :: DLUp

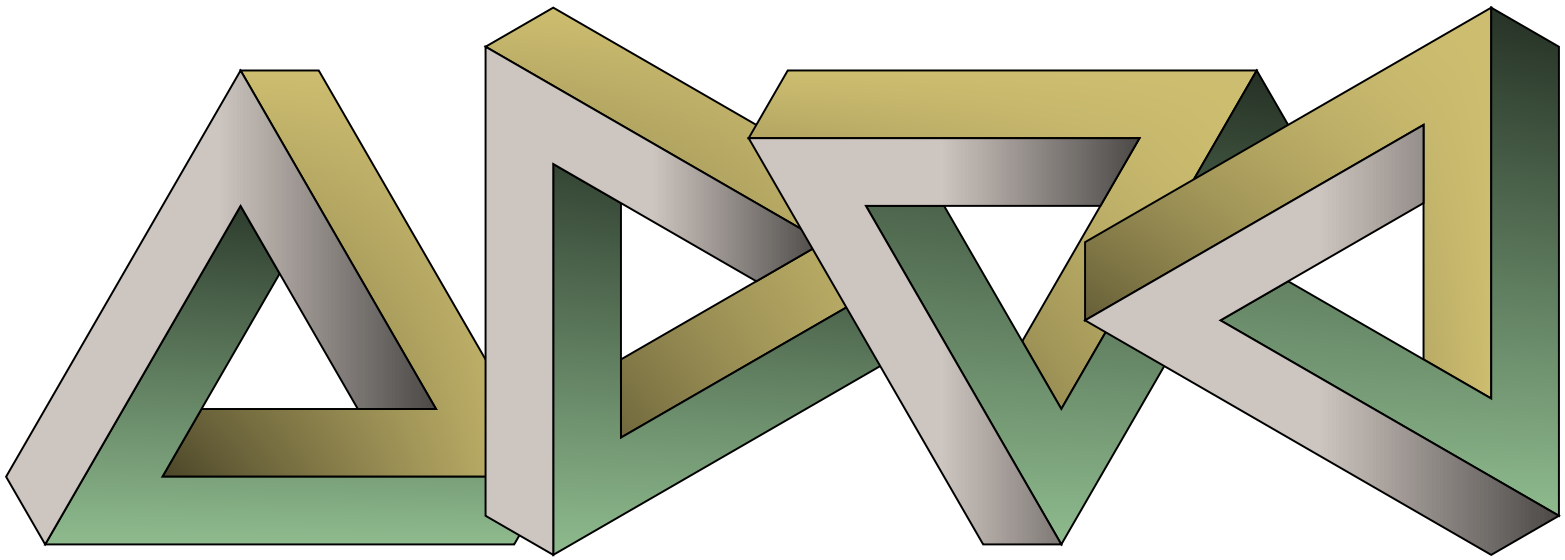
```
\DLUp[rotate]{tl}{tr}{b}{fill}{draw}{spaces}{scale}{lineWidth}
```

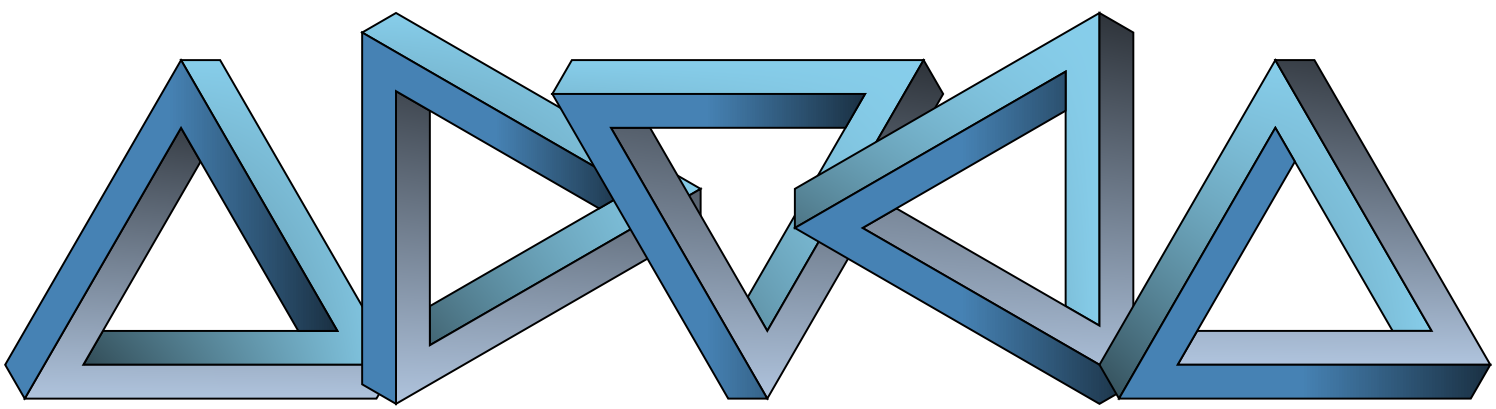
```
\DLUp[25]{A}{B}{C}{SlateGray3}{SlateGray4!75!black}{5}{1}{0.375}
```

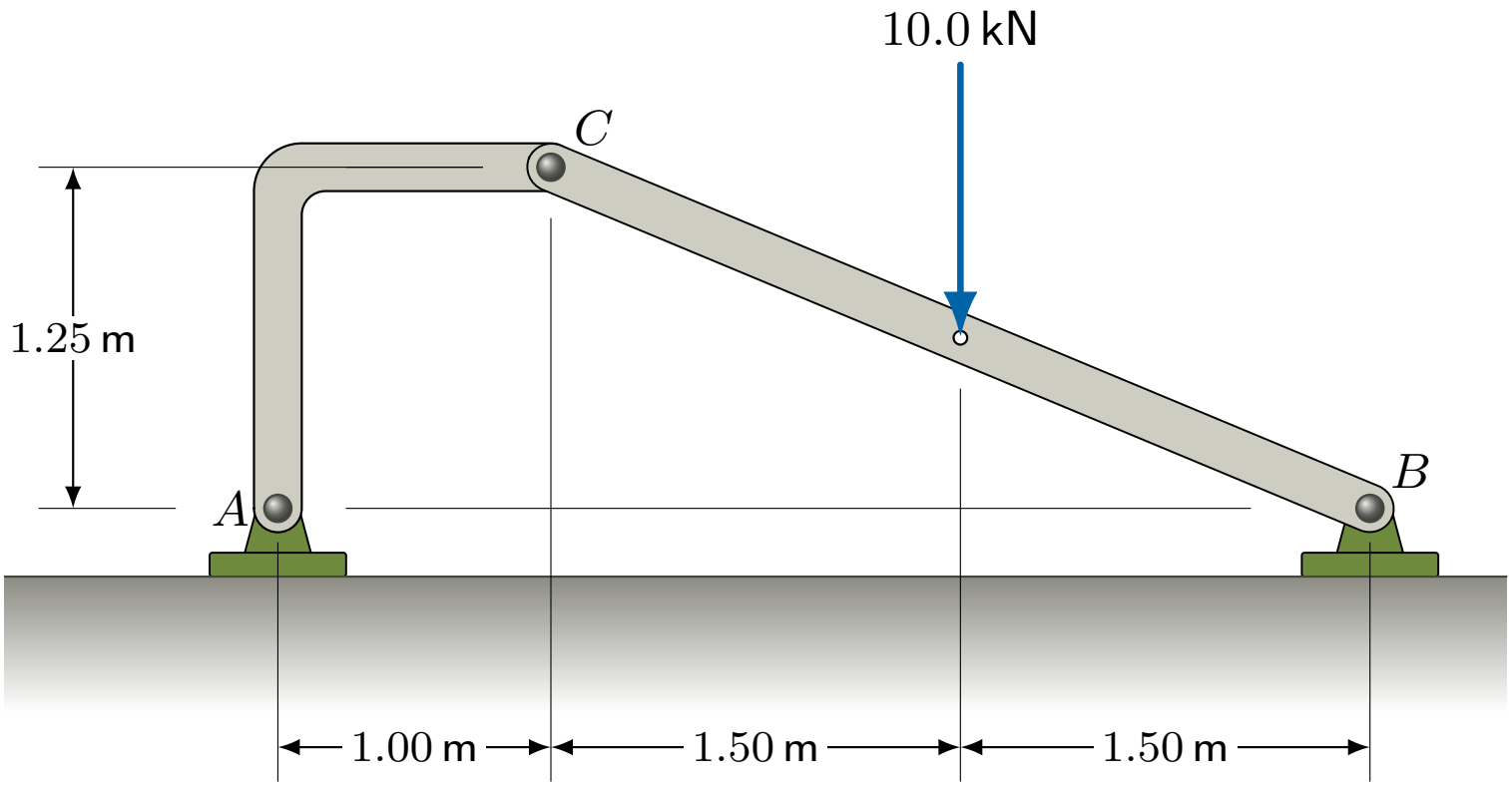


Misc Tikz :: Penrose Triangle

```
\PenroseTri[rotate]{coord}{length}{extend}{fillbottom}{fillright}
                                                {fillleft}{draw}{lineWidth}
```






10.0 kN
C
1.25 m
A
B
1.00 m
1.50 m
1.50 m

Geometry :: How To Construct A 30° Angle With A Pair Of Compasses

1. To do this, you will need a pair of compasses (sometimes known, incorrectly, as a compass: whatever you call it, you need the device that draws circles or arcs) and a sheet of paper to work on.

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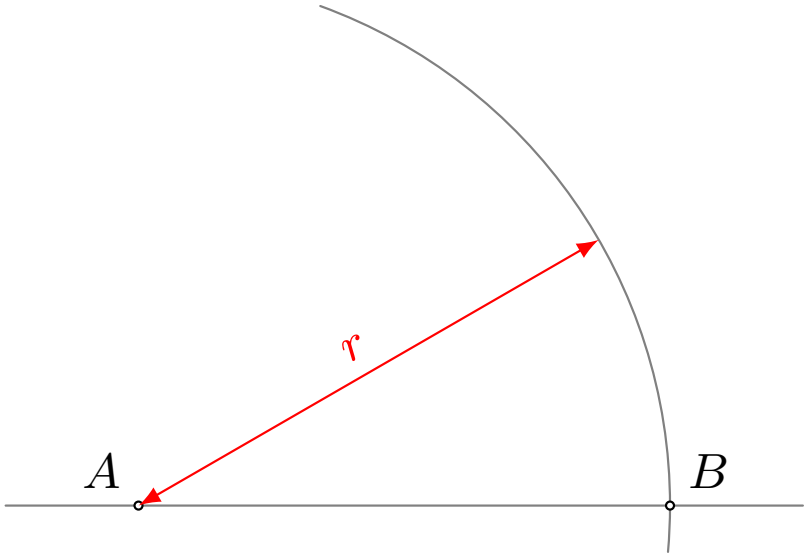

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3. Using the pair of compasses, draw an arc with centre A and radius r as shown. Mark the intersection of the arc with the line as point B.

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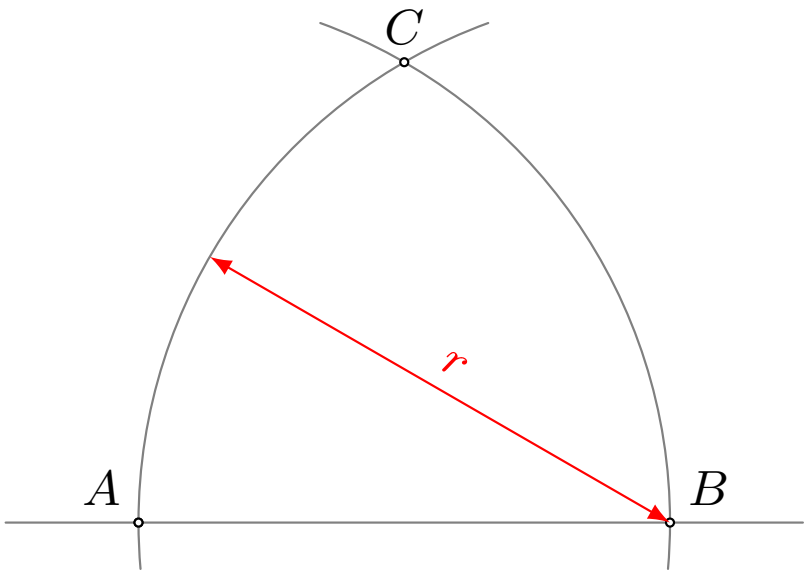

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4. Keeping the radius at r, draw an arc with centre B as shown. Mark the intersection of the two arcs as C.

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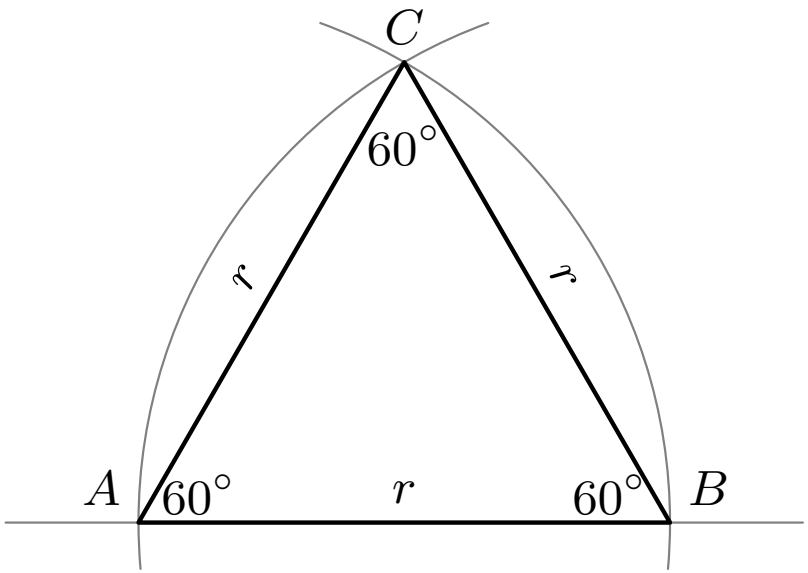

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5. $\triangle ABC$ is equilateral with sides of length r.

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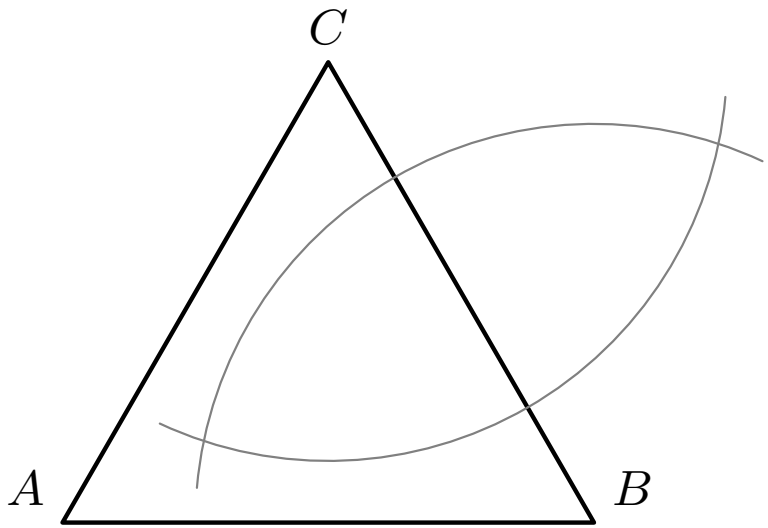

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5. $\triangle ABC$ is equilateral with sides of length r.
6. Draw arcs centred at B and C, with radius $r' \approx 0.75r$, as shown.(The exact value of r' is not critical but it should be the same value for both arcs.)

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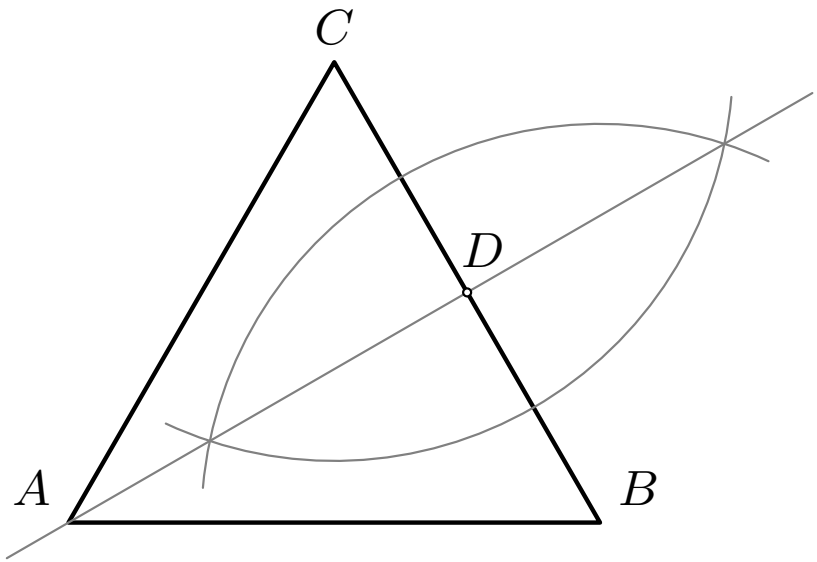

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6. Draw arcs centred at B and C, with radius $r' \approx 0.75r$, as shown.(The exact value of r' is not critical but it should be the same value for both arcs.)
7. Draw a line between the intersection of these two arcs. This line bisects BC at D. It also passes through A, bisecting $\angle BAC$.

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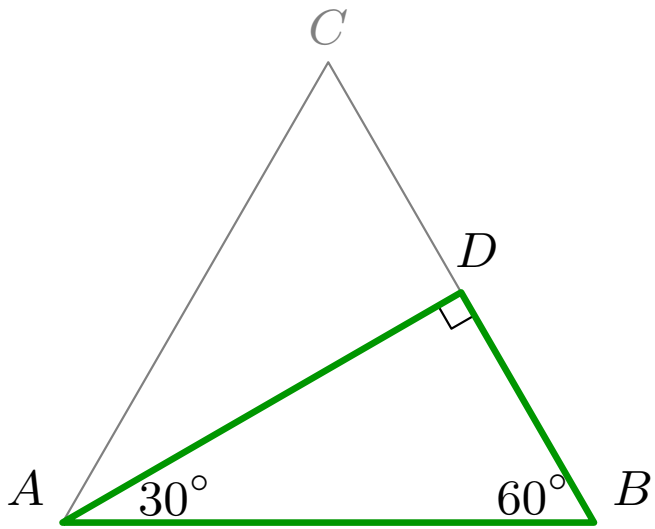

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7. Draw a line between the intersection of these two arcs. This line bisects BC at D. It also passes through A, bisecting $\angle BAC$.
8. $\angle BAD = 30^\circ$, as required.