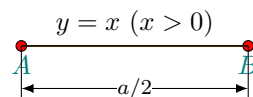


```

1 \usepackage{tikz}
2 \usepackage{tkz-euclide}
3
4 % Paint segment
5 \begin{tikzpicture}[>=latex]
6   \tkzDefPoints{0/0/A,3/0/B}
7   \tkzDrawPoints[color=black,fill=red,size=4](A,B)
8   \tkzLabelPoints[below,color=teal](A,B)
9   \tkzDrawSegments[style=orange](A,B)
10  \tkzDrawSegment[dim={\$a/2\$, -16pt,}] (A,B)
11  \tkzLabelSegments[above](A,B){\$y=x \ (x>0)\$}
12
13  \tkzDefPoints{0/-4/C,3/-4/D}
14  \tkzDrawPoints[color=teal](C,D)
15  \tkzDrawSegments[orange,->](C,D)
16 \end{tikzpicture}

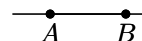
```



```

1 % Paint line
2 \begin{tikzpicture}
3   \tkzDefPoints{0/0/A,1/0/B}
4   \tkzDrawPoints(A,B)
5   \tkzLabelPoints[below](A,B)
6   \tkzDrawSegments(A,B)
7   \tkzDefPoints{0/0/A,1/0/B}
8   \tkzDrawLines[add=0.5 and 0.3](A,B)
9   \tkzLabelPoints[below](A,B)
10  \tkzDrawPoints(A,B)
11 \end{tikzpicture}

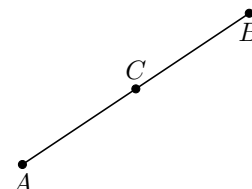
```



```

1 % Paint Midpoint
2 \begin{tikzpicture}
3   \tkzDefPoints{0/0/A,3/2/B}
4   \tkzDrawSegments(A,B)
5   \tkzLabelPoints[below](A,B)
6   \tkzDrawPoints(A,B)
7   \tkzDefMidPoint(A,B) \tkzGetPoint{C}
8   \tkzDrawPoints(C)
9   \tkzLabelPoints[above](C)
10 \end{tikzpicture}

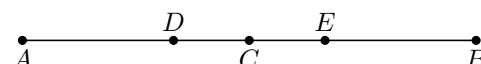
```



```

1 % Getpoint
2 \begin{tikzpicture}
3   \tkzDefPoints{0/0/A,6/0/B}
4   \tkzDrawSegments(A,B)
5   \tkzLabelPoints[below](A,B)
6   \tkzDrawPoints(A,B)
7   \tkzDefMidPoint(A,B) \tkzGetPoint{C}
8   \tkzDrawPoints(C)
9   \tkzLabelPoints[below](C)
10  \tkzDefPointWith[linear,K=0.333](A,B) \tkzGetPoint{D}
11  \tkzDrawPoints(D)
12  \tkzLabelPoints[above](D)
13  \tkzDefPointWith[linear,K=0.333](B,A) \tkzGetPoint{E}
14  \tkzDrawPoints(E)
15  \tkzLabelPoints[above](E)
16 \end{tikzpicture}

```



```

1 \begin{tikzpicture}
2   \tkzDefPoints{0/0/A,5/1/B,2.5/3.75/C}
3   \tkzLabelPoint[below](A){ $A(0,0)$ }
4   \tkzLabelPoint[below](B){ $B(5,1)$ }
5   \tkzLabelPoint[above](C){ $C(2.5,3.75)$ }
6   \tkzDrawPolygon[red](A,B,C)
7   \tkzMarkAngles[mark=none,size=.3](B,A,C A,C,B C,B,A)
8   \tkzLabelAngle[pos=.6](B,A,C){ $\alpha$ }
9   \tkzLabelAngle[pos=.6](A,C,B){ $\beta$ }
10  \tkzLabelAngle[pos=.8,fill=red](C,B,A){ $36^\circ$ }
11  \tkzDefMidPoint(A,B) \tkzGetPoint{E}
12  \tkzDefMidPoint(C,B) \tkzGetPoint{F}
13  \tkzDefMidPoint(A,C) \tkzGetPoint{G}
14  \tkzDrawSegments[dashed](C,E B,G A,F)
15  \tkzLabelPoints[below](E)
16  \tkzLabelPoints[left](G)
17  \tkzLabelPoints[right](F)
18  \tkzInterLL(A,F)(C,E) \tkzGetPoint{H}
19  \tkzLabelPoints[below](H)
20  \tkzDrawPoints(H)
21  % projection mode
22  \tkzDefPointBy[projection=onto A--B](C) \tkzGetPoint{D}
23  \tkzLabelPoints[below](D)
24  \tkzDrawSegments[dashed](C,D)
25  \tkzMarkRightAngles[mark=none,size=.3,fill=red,opacity=0.5](C,D,A)
26 \end{tikzpicture}

```

