```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент Сидоров Р.О. гр. 6871}
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```

\newcommand{\lygol3}{\D*cos(

```
\end{document}
```

Богдановский
6871

```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент                                }
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```

\begin{document}
\make title
\begin{tikzpicture}[scale=0,6]
\new command {\alfa}{30}
\new command{\D}{9}

```
\end{document}
```

Осенина С. 6871

```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент                                    }
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```

\begin{document}

\maketitle

\begin{tikzpicture}[scale=0.6]

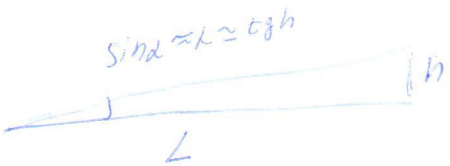
~~\newcommand{\D}{5}~~

\newcommand{\alfa}{30}

\newcommand{\D}{9}

\end{document}

```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент Ядрин А.В. 6871 }
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```




```
\end{document}
```

```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент Жуйвцёв А.Ю. }
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```

\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{30°}
~~\newcommand{\theta}{105°}~~
\newcommand{\teta}{105°}
\newcommand{\D}{10}
\draw[thin,->] (0,0)--(10,0) node[below] {Re};
\draw[thin,->] (0,0)--(0,10) node[left] {Im};
\draw[red,thick,->] (0,0)--({\D*cos(\alfa)},{\D*cos(\alfa)})
node[right] {$\vec{a}$};

```
\end{document}
```

```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент Увин С. С. 6871 }
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```

\begin{document}
\maketitle
\begin{tikzpicture}[scale=1.5]
\newcommand{[illegible]}{\alfa}{30}
\newcommand{\D}{7}
\newcommand{\theta}{95}
\draw[thin,->,>=stealth'](0,0)--(9,0) node[below]{Re};
\draw[thin,->,>=stealth'](0,0)--(0,7) node[left]{Im};
\draw[red,thick,->,>=stealth'](0,0)--({\D*cos(\alfa)},
{\D*sin(\alfa)}) node[right]{$\vec{x}$}
\draw[red,thin,dashed]({\D*cos(\alfa)},{\D*sin(\alfa)})--

```
\end{document}
```

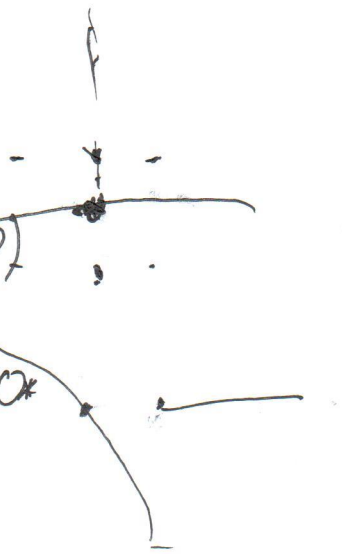
```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент Семёнов 6841.
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```

\begin{tikzpicture}[scale=0,6]
\newcommand{\alfa}{30}
\newcommand{\tetq}{100}
\draw[thin,->,>=stealth'](0,0)-(10,0) node[below]
{x_1}
\draw[thin,->,>=stealth'](0,0)--(0,9)node[left]
{x^2}
\draw[thin,->,>=stealth'](0,0)--({\100*cos(\alfa)},{\100*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[thin,dashed]({\100*cos(\alfa)},{\100*sin(\alfa)})--(0,{\100*sin(\alfa)})
node[below]{x_1};
\draw[thin,dashed]({\100*cos(\alfa)},{\100*sin(\alfa)})--(0,{\100*sin(\alfa)})
node[left]{x^2};

Михайлов гр 6871

```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент                                    }
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```

\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{30}
\newcommand{\theta}{125}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'](0,0)--(10,0)
node[below] {Re}
\draw[thin,->,>=stealth'](0,0)--(0,{10*



\end{document}

```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент Бочкарева В.А 6871}
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```

\newcomand{\teta}{85}

\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{30}
\newcommand{\teta}{85}
\newcommand{\D}{8}
\draw[thin,→,>=stealth'] (0,0) -- (6,0) node[below]
{Re};
\draw[thin,→,>=stealth'](0,0)--(0,3) node[left]
{Im};
\draw[red,thick,→,>=stealth'](0,0)--({\D·cos(\alfa)}),
{\D·sin(\alfa)}) node[right]{$\vec{x}$};
\draw[red,thin,dashed]({\D·cos(\alfa)},{\D·sin(\alfa)})-
-({\D·cos(\alfa)},0) node[below]{$Re(x)$};
\draw[red,thin,dashed]({\D·cos(\alfa)},{\D·sin(\alfa)})
--(0,{\D·sin(\alfa)}) node[left]{$Im(x)$};
\draw[blue,thin,<->](1.5,0) arc(0:60:1.5) node[midway,
right]{$\alpha=30^\circ$};
\draw[thin,→,>=stealth']

```
\end{document}
```

6871
Фролов С. С.

```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент                                    }
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```

\begin{document}
\maketitle
\begin{tikzpicture}[scale=1.3]
\newcommand{\alfa}{30}
\newcommand{\D}{11}
\newcommand{\Teta}{115}
\draw[thin,->,>=stealth'] (0,0) -- (7,0) node[below]{Re};
\draw[thin,->,>=stealth'] (0,0) -- (0,8) node[left]{Im};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)},
{\D*sin(\alfa)}) node[right]{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)},{\D*sin(\alfa)}) --
({\D*cos(\alfa)},0) node[below]{$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)},{\D*sin(\alfa)}) --(0,
{\D*sin(\alfa)}) node[left]{$Im(x)$};
\draw[blue,thin,<->] (2.5,0) arc(0:30:2.5) node[midway,right]
{$\alpha=30^\circ$};
\draw[green,thick,->,>=stealth'] (0,0) -- ({\D*cos(\Teta)},
{\D*sin(\Teta)}) node[left]{$\vec{x}$};

- Копируем „v", заменяем „alfa" на „Teta".

\draw[blue,thin,<->] (3.5,0) arc(0:115:3.5) node[midway,

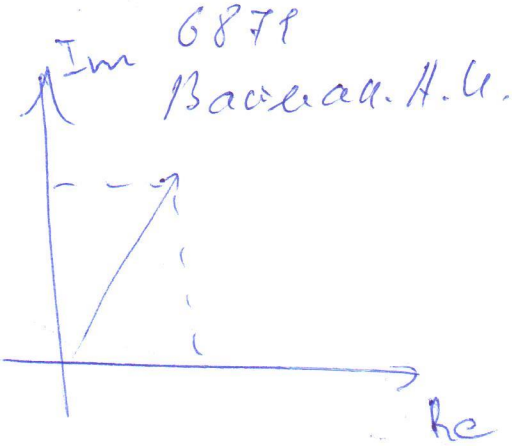
```
\end{document}
```

ОФ 1
Кузнецов М.

```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент                                    }
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```

\ begin { document }
\ make title
\ begin { tikzpicture } [scale = 1.6]
\ new command { \D } { 30 } { \ alfa } { 30 }
\ new command { \D } { 5 } { 9 }
\ new command { teta } { 90 }
\ draw [thin, →, >= stealth '] (0, 0) -- (7, 0) node [below] { $ Re $ };
\ draw [thin, →, >= stealth '] (0, 0) -- (0, 9) node [left] { $ Im $ };
\ draw [red, thick, →, >= stealth '] (0, 0) -- ({ \D * cos (\ alfa) }, { \D * sin (\ alfa) }) node [right] { $ \ vec { x } $ };
\ draw [red, thick, dashed] ({ \D · cos (\ alfa) }, { \D * sin (\ alfa) }) -- ({ \D · cos (\ alfa) }, 0) node [below] { $ Re (x) $ };
\ draw [red, thick, dashed] (0, { \D · sin (\ alfa) }) node [left] { $ Im (x) $ };

```
\end{document}
```



6871
Васильев А.А.

```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент                                    }
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```

```
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{30}
\newcommand{\D}{9}
\newcommand{teta}{110}
\draw[thin,->](0,0) -- (8,0) node[below]{$Re$};
\draw[thin,->](0,0) -- (0,9) node[left]{$Im$};
\draw[red,thick,->](0,0) -- ({\D*cos(\alfa)},{\D*sin(\alfa)})
node[right]{$\vec{x}$};
\draw[red,thin,dashed]({\D*cos(\alfa)},{\D*sin(\alfa)}) --
({\D*cos(\alfa)},0) node[below]{$Re(x)$};
\draw[red,thin,dashed]({\D*cos(\alfa)},{\D*sin(\alfa)}) --
(0,{\D*sin(\alfa)}) node[left]{$Im(x)$};
\draw[blue,thin,<->](1,5,0) arc(0:30:1,5) node[midway,right]
($\alpha=30^\circ$);
```

```
\end{document}
```

Терентьев Алексей 6871

```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент                    }
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```

\begin{document}
\maketitle
\begin{tikzpicture}[scale=0,6]
\newcommand{\alfa}{30}
\newcommand{\D}{5}
\newcommand{\Teta}{120}
\draw[thin,->,>=stealth'](0,0)--(7,0) node[below]{Re}
\draw[thin,->,>=stealth'](0,0)--(0,8) node[Left]{Im}
\draw[red,thick,->,>=stealth'](0,0)--({\D*cos(\alfa)},

```
\end{document}
```

```
\documentclass[a4paper,11pt]{article}
\usepackage[T2A]{fontenc}
\usepackage[utf8]{inputenc}
\usepackage[english, russian]{babel}
\usepackage{tikz}
\usepackage[european,cuteinductors,smartlabels]{circuitikz}
\title{Практическая работа №2}
\author{студент Макеев Л.А. Г.Р. 6871 }
% Конец преамбулы
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0.6]
\newcommand{\alfa}{60}
\newcommand{\D}{5}
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*sin(\alfa)}) node[right]
{$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- ({\D*cos(\alfa)}, 0)
node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)}, {\D*sin(\alfa)}) -- (0, {\D*sin(\alfa)})
node[left] {$Im(x)$};
\draw[blue,thin,<->] (1.5,0) arc(0:60:1.5) node[midway,right] {$\alpha=60^\circ$};
\end{tikzpicture}
```

```
\begin{document}
\maketitle
\begin{tikzpicture}[scale=0,6]   \newcommand{\teta}{80}
\newcommand{\alfa}{30}
\new command{\D}{5}
%\draw[thin,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)}, {\D*cos(\alfa)},0)
node[below] {$Re$};
%\draw[red,thin,dashed
\draw[thin,->,>=stealth'] (0,0) -- (5,0) node[below] {$Re$};
\draw[thin,->,>=stealth'] (0,0) -- (0,6) node[left] {$Im$};
\draw[red,thick,->,>=stealth'] (0,0) -- ({\D*cos(\alfa)},
{\D*cos(\alfa)}) node[right] {$\vec{x}$};
\draw[red,thin,dashed] ({\D*cos(\alfa)},{\D*sin(alfa)})
-- ({\D*cos(\alfa)},0),0} node[below] {$Re(x)$};
\draw[red,thin,dashed] ({\D*cos(\alfa)},{\D*sin(\alfa)}--
(0,{\D*sin(\alfa)}) node[left] {$Im(x)$};
\draw[blue,thin,<->](1,5,0) arc(0:60:1,5) node[midway,right]
{$\alpha=60^\circ$};
\end{tikzpicture}
```

```
\end{document}
```

```
\draw [thin, <->] (2,10,0) arc
(0,30:2,30) node [midway, right]
{$\alpha=30^\circ$};
\end{tikzpicture}
```