

Индивидуальное задание.

Построить на одном графике правильный треугольник, шестиугольник и восьмиугольник с радиусом описанной окружности R , центром в точке O .

Повернуть треугольник на α градусов, изобразить старый и новый треугольники на одном графике.

Найти пересечение правильного шестиугольника и его копии, повернутой на угол β градусов.

Вариант N 1

$$R = 2, \alpha = 90, \beta = 45, O(-12, 6).$$

Вариант N 2

$$R = 5, \alpha = 30, \beta = 150, O(12, 2).$$

Вариант N 3

$$R = 7, \alpha = -135, \beta = 165, O(-11, 7).$$

Вариант N 4

$$R = 3, \alpha = 135, \beta = 90, O(-9, 2).$$

Вариант N 5

$$R = 6, \alpha = 90, \beta = 120, O(12, 10).$$

Вариант N 6

$$R = 3, \alpha = -120, \beta = 105, O(6, 9).$$

Вариант N 7

$$R = 12, \alpha = -90, \beta = 135, O(9, -2).$$

Вариант N 8

$$R = 9, \alpha = -120, \beta = 15, O(8, 8).$$

Вариант N 9

$$R = 11, \alpha = 135, \beta = 90, O(10, -3).$$

Вариант N 10

$$R = 7, \alpha = -60, \beta = 75, O(8, 12).$$

Вариант N 11

$$R = 10, \alpha = -90, \beta = 45, O(8, -11).$$

Вариант N 12

$$R = 7, \alpha = 60, \beta = 15, O(5, -12).$$

Вариант N 13

$$R = 3, \alpha = 90, \beta = 45, O(4, 6).$$

Вариант N 14

$$R = 2, \alpha = -90, \beta = 135, O(-2, -3).$$

Вариант N 15

$$R = 12, \alpha = 90, \beta = 45, O(-11, 9).$$

Вариант N 16

$$R = 3, \alpha = -60, \beta = 75, O(5, -9).$$

Вариант N 17

$$R = 12, \alpha = 90, \beta = 135, O(6, -10).$$

Вариант N 18

$$R = 7, \alpha = 120, \beta = 30, O(2, -10).$$

Вариант N 19

$$R = 7, \alpha = -45, \beta = 105, O(9, -3).$$

Вариант N 20

$$R = 5, \alpha = 45, \beta = 165, O(3, -4).$$

Вариант N 21

$$R = 2, \alpha = 135, \beta = 75, O(8, 6).$$

Вариант N 22

$$R = 12, \alpha = 90, \beta = 135, O(3, 6).$$

Вариант N 23

$$R = 12, \alpha = 30, \beta = 165, O(-7, -6).$$

Вариант N 24

$$R = 5, \alpha = -120, \beta = 15, O(4, 11).$$

Вариант N 25

$$R = 9, \alpha = 45, \beta = 165, O(7, -3).$$

Вариант N 26

$$R = 10, \alpha = -135, \beta = 90, O(2, -4).$$

Вариант N 27

$$R = 12, \alpha = 45, \beta = 105, O(4, 4).$$

Вариант N 28

$$R = 3, \alpha = 60, \beta = 15, O(6, -5).$$

Вариант N 29

$$R = 5, \alpha = 90, \beta = 120, O(-2, -10).$$

Вариант N 30

$$R = 7, \alpha = 135, \beta = 75, O(10, 2).$$

Вариант N 31

$$R = 10, \alpha = 120, \beta = 60, O(-4, -5).$$

Вариант N 32

$$R = 8, \alpha = 45, \beta = 90, O(2, -6).$$

Вариант N 33

$$R = 9, \alpha = -45, \beta = 45, O(-9, -12).$$

Вариант N 34

$$R = 12, \alpha = 45, \beta = 105, O(9, -11).$$

Вариант N 35

$$R = 12, \alpha = 45, \beta = 165, O(-4, -4).$$

Вариант N 36

$$R = 7, \alpha = 135, \beta = 45, O(-6, -8).$$

Вариант N 37

$$R = 9, \alpha = -90, \beta = 60, O(11, -2).$$

Вариант N 38

$$R = 2, \alpha = -135, \beta = 90, O(-4, 11).$$

Вариант N 39

$$R = 10, \alpha = -135, \beta = 135, O(-7, 2).$$

Вариант N 40

$$R = 6, \alpha = 135, \beta = 15, O(2, -8).$$

Вариант N 41

$$R = 5, \alpha = 45, \beta = 75, O(9, 8).$$

Вариант N 42

$$R = 8, \alpha = 60, \beta = 150, O(-6, 7).$$

Вариант N 43

$$R = 12, \alpha = -60, \beta = 30, O(8, -5).$$

Вариант N 44

$$R = 6, \alpha = -135, \beta = 90, O(5, -6).$$

Вариант N 45

$$R = 9, \alpha = 30, \beta = 150, O(2, -12).$$

Вариант N 46

$$R = 7, \alpha = -60, \beta = 150, O(-11, -8).$$

Вариант N 47

$$R = 11, \alpha = 135, \beta = 75, O(8, -7).$$

Вариант N 48

$$R = 9, \alpha = 60, \beta = 105, O(8, -11).$$

Вариант N 49

$$R = 9, \alpha = 90, \beta = 45, O(-9, 7).$$

Вариант N 50

$$R = 3, \alpha = -135, \beta = 105, O(6, 3).$$

Вариант N 51

$$R = 2, \alpha = -30, \beta = 15, O(9, 10).$$

Вариант N 52

$$R = 6, \alpha = 60, \beta = 120, O(9, -10).$$

Вариант N 53

$$R = 11, \alpha = 45, \beta = 90, O(-2, -10).$$

Вариант N 54

$$R = 10, \alpha = 60, \beta = 30, O(-2, 3).$$

Вариант N 55

$$R = 12, \alpha = 90, \beta = 45, O(-12, -3).$$

Вариант N 56

$$R = 8, \alpha = 90, \beta = 135, O(-4, 4).$$

Вариант N 57

$$R = 9, \alpha = -135, \beta = 105, O(12, -3).$$

Вариант N 58

$$R = 7, \alpha = -45, \beta = 165, O(5, 4).$$

Вариант N 59

$$R = 11, \alpha = 135, \beta = 45, O(-5, -7).$$

Вариант N 60

$$R = 10, \alpha = 135, \beta = 165, O(-2, 10).$$

Вариант N 61

$$R = 12, \alpha = 120, \beta = 150, O(3, -9).$$

Вариант N 62

$$R = 2, \alpha = 45, \beta = 165, O(4, 11).$$

Вариант N 63

$$R = 8, \alpha = 90, \beta = 45, O(-3, -10).$$

Вариант N 64

$$R = 11, \alpha = 60, \beta = 105, O(4, -4).$$

Вариант N 65

$$R = 8, \alpha = 45, \beta = 165, O(-6, 4).$$

Вариант N 66

$$R = 12, \alpha = 45, \beta = 165, O(11, -10).$$

Вариант N 67

$$R = 5, \alpha = -45, \beta = 90, O(-4, -6).$$

Вариант N 68

$$R = 8, \alpha = 45, \beta = 135, O(-5, 3).$$

Вариант N 69

$$R = 12, \alpha = -45, \beta = 75, O(10, 6).$$

Вариант N 70

$$R = 3, \alpha = -135, \beta = 105, O(-12, -9).$$

Вариант N 71

$$R = 8, \alpha = 60, \beta = 105, O(-11, 4).$$

Вариант N 72

$$R = 11, \alpha = 120, \beta = 165, O(12, 6).$$

Вариант N 73

$$R = 3, \alpha = -120, \beta = 90, O(11, 7).$$

Вариант N 74

$$R = 5, \alpha = 120, \beta = 30, O(6, 5).$$

Вариант N 75

$$R = 3, \alpha = -45, \beta = 105, O(-7, 2).$$

Вариант N 76

$$R = 9, \alpha = 135, \beta = 90, O(4, 10).$$

Вариант N 77

$$R = 6, \alpha = 120, \beta = 60, O(6, -4).$$

Вариант N 78

$$R = 12, \alpha = 45, \beta = 90, O(7, -9).$$

Вариант N 79

$$R = 9, \alpha = 45, \beta = 105, O(11, 12).$$

Вариант N 80

$$R = 10, \alpha = -45, \beta = 75, O(5, 4).$$

Вариант N 81

$$R = 7, \alpha = -45, \beta = 90, O(-10, 2).$$

Вариант N 82

$$R = 10, \alpha = -45, \beta = 90, O(-9, -2).$$

Вариант N 83

$$R = 4, \alpha = 90, \beta = 150, O(4, -3).$$

Вариант N 84

$$R = 8, \alpha = -90, \beta = 60, O(5, 4).$$

Вариант N 85

$$R = 4, \alpha = -60, \beta = 30, O(12, 7).$$

Вариант N 86

$$R = 7, \alpha = 30, \beta = 165, O(12, -2).$$

Вариант N 87

$$R = 7, \alpha = 135, \beta = 165, O(11, 11).$$

Вариант N 88

$$R = 6, \alpha = 135, \beta = 90, O(-10, 4).$$

Вариант N 89

$$R = 10, \alpha = 30, \beta = 150, O(10, -12).$$

Вариант N 90

$$R = 3, \alpha = 135, \beta = 75, O(-3, -10).$$

Вариант N 91

$$R = 6, \alpha = 90, \beta = 150, O(3, -10).$$

Вариант N 92

$$R = 4, \alpha = 60, \beta = 105, O(-5, -3).$$

Вариант N 93

$$R = 9, \alpha = -30, \beta = 30, O(7, 7).$$

Вариант N 94

$$R = 12, \alpha = 60, \beta = 15, O(7, 6).$$

Вариант N 95

$$R = 10, \alpha = -135, \beta = 105, O(-12, -5).$$

Вариант N 96

$$R = 7, \alpha = 45, \beta = 90, O(-10, -4).$$

Вариант N 97

$$R = 8, \alpha = -45, \beta = 75, O(8, 11).$$

Вариант N 98

$$R = 8, \alpha = -135, \beta = 90, O(7, -3).$$

Вариант N 99

$$R = 9, \alpha = 135, \beta = 105, O(-3, 6).$$

Вариант N 100

$$R = 8, \alpha = -60, \beta = 150, O(-10, -7).$$

Вариант N 101

$$R = 11, \alpha = 60, \beta = 105, O(-9, 11).$$

Вариант N 102

$$R = 7, \alpha = 90, \beta = 120, O(-8, -3).$$

Вариант N 103

$$R = 11, \alpha = -135, \beta = 90, O(6, -9).$$

Вариант N 104

$$R = 12, \alpha = -90, \beta = 45, O(3, 2).$$

Вариант N 105

$$R = 5, \alpha = 120, \beta = 165, O(11, 11).$$

Вариант N 106

$$R = 2, \alpha = 135, \beta = 90, O(-5, 7).$$

Вариант N 107

$$R = 7, \alpha = 45, \beta = 105, O(11, -8).$$

Вариант N 108

$$R = 12, \alpha = -45, \beta = 90, O(-11, 2).$$

Вариант N 109

$$R = 11, \alpha = -45, \beta = 90, O(3, 8).$$

Вариант N 110

$$R = 8, \alpha = 120, \beta = 75, O(-12, 8).$$

Вариант N 111

$$R = 5, \alpha = 45, \beta = 105, O(8, -6).$$

Вариант N 112

$$R = 2, \alpha = 45, \beta = 105, O(-9, -4).$$

Вариант N 113

$$R = 12, \alpha = 45, \beta = 135, O(-8, 9).$$

Вариант N 114

$$R = 6, \alpha = -120, \beta = 105, O(6, -5).$$

Вариант N 115

$$R = 12, \alpha = -45, \beta = 45, O(-5, -11).$$

Вариант N 116

$$R = 9, \alpha = 120, \beta = 75, O(-5, -6).$$

Вариант N 117

$$R = 9, \alpha = 90, \beta = 135, O(-10, -12).$$

Вариант N 118

$$R = 8, \alpha = -135, \beta = 135, O(-7, 11).$$

Вариант N 119

$$R = 6, \alpha = 135, \beta = 75, O(4, -6).$$

Вариант N 120

$$R = 10, \alpha = -90, \beta = 135, O(-8, -6).$$

Вариант N 121

$$R = 8, \alpha = 60, \beta = 105, O(-3, 10).$$

Вариант N 122

$$R = 12, \alpha = -45, \beta = 90, O(2, 8).$$

Вариант N 123

$$R = 11, \alpha = 45, \beta = 90, O(-2, -2).$$

Вариант N 124

$$R = 12, \alpha = 60, \beta = 105, O(9, 8).$$

Вариант N 125

$$R = 3, \alpha = 135, \beta = 15, O(-8, 7).$$

Вариант N 126

$$R = 6, \alpha = -135, \beta = 90, O(-7, 8).$$

Вариант N 127

$$R = 6, \alpha = -45, \beta = 90, O(-12, 5).$$

Вариант N 128

$$R = 4, \alpha = -60, \beta = 75, O(11, 4).$$

Вариант N 129

$$R = 3, \alpha = -135, \beta = 75, O(7, -12).$$

Вариант N 130

$$R = 10, \alpha = 60, \beta = 150, O(-9, -2).$$

Вариант N 131

$$R = 8, \alpha = 60, \beta = 15, O(-7, 6).$$

Вариант N 132

$$R = 9, \alpha = -60, \beta = 75, O(-10, 12).$$

Вариант N 133

$$R = 5, \alpha = 120, \beta = 90, O(6, -7).$$

Вариант N 134

$$R = 9, \alpha = 90, \beta = 45, O(2, -6).$$

Вариант N 135

$$R = 9, \alpha = 135, \beta = 15, O(-6, 8).$$

Вариант N 136

$$R = 6, \alpha = -45, \beta = 90, O(12, -6).$$

Вариант N 137

$$R = 7, \alpha = 90, \beta = 45, O(-5, 3).$$

Вариант N 138

$$R = 4, \alpha = 30, \beta = 90, O(12, -9).$$

Вариант N 139

$$R = 11, \alpha = -45, \beta = 165, O(12, 12).$$

Вариант N 140

$$R = 9, \alpha = -60, \beta = 150, O(-4, 2).$$

Вариант N 141

$$R = 3, \alpha = 90, \beta = 30, O(-8, 9).$$

Вариант N 142

$$R = 4, \alpha = 135, \beta = 45, O(5, 2).$$

Вариант N 143

$$R = 9, \alpha = 45, \beta = 15, O(9, -10).$$

Вариант N 144

$$R = 2, \alpha = 90, \beta = 150, O(-11, 3).$$

Вариант N 145

$$R = 12, \alpha = 135, \beta = 165, O(-9, -11).$$

Вариант N 146

$$R = 5, \alpha = -45, \beta = 45, O(9, -6).$$

Вариант N 147

$$R = 8, \alpha = -120, \beta = 105, O(4, 5).$$

Вариант N 148

$$R = 10, \alpha = 120, \beta = 30, O(-3, 9).$$

Вариант N 149

$$R = 5, \alpha = -60, \beta = 165, O(-5, -8).$$

Вариант N 150

$$R = 9, \alpha = -120, \beta = 120, O(3, 2).$$