# Styczna do okręgu - odpowiedzi

#### GRUPA A

- 1. F, F, P, F
- 2. A
- 3.
- 4. C
- $5.65^{\circ}, 90^{\circ}, 25^{\circ}$
- 6.  $\alpha = 45^{\circ}$ ,  $\beta = 36^{\circ}$ ,  $\gamma = 55^{\circ}$
- $7.21 \, \text{cm}^2$
- 8. 30°, 90°, 150°, 90°
- 9.8cm
- $10.90^{\circ}, 30^{\circ}, 165^{\circ}, 75^{\circ}$
- 11. F, F, F
- 12.48

## GRUPA B

- 1. F, P, P, P
- 2. C
- 3.
- 4. B
- 5. 55°, 90°, 35°
- 6.  $\alpha = 40^{\circ}$ ,  $\beta = 26^{\circ}$ ,  $\gamma = 75^{\circ}$
- 7.  $15 \, \text{cm}^2$
- 8. 40°, 90°, 140°, 90°
- 9. 18 cm
- $10.90^{\circ}$ ,  $110^{\circ}$ ,  $125^{\circ}$ ,  $35^{\circ}$
- 11. F, F, P
- 12.54

#### GRUPA C

- 1. P, P, F, F
- 2. B
- 3.
- 4. B
- 5. 20°, 90°, 70°
- 6.  $\alpha = 50^{\circ}$ ,  $\beta = 40^{\circ}$ ,  $\gamma = 80^{\circ}$
- 7.  $14 \text{ cm}^2$
- 8. 60°, 90°, 120°, 90°

- 9. 16 cm
- 10. 90°, 50°, 155°, 65°
- 11. F, F, P
- 12.42

## GRUPA D

- 1. P, F, F, P
- 2. D
- 3.
- 4. B
- $5.40^{\circ}, 90^{\circ}, 50^{\circ}$
- 6.  $\alpha = 70^{\circ}$ ,  $\beta = 38^{\circ}$ ,  $\gamma = 85^{\circ}$
- 7.  $12 \text{ cm}^2$
- 8.  $80^{\circ}$ ,  $90^{\circ}$ ,  $100^{\circ}$ ,  $90^{\circ}$
- 9.6cm
- 10.90°, 120°, 120°, 30°
- 11. F, P, F
- 12.48

#### GRUPA E

- 1. F, F, P, F
- 2. C
- 3.
- 4. A
- 5. 30°, 90°, 60°
- 6.  $\alpha = 35^{\circ}$ ,  $\beta = 34^{\circ}$ ,  $\gamma = 50^{\circ}$
- $7.12 \, \text{cm}^2$
- 8.  $70^{\circ}$ ,  $90^{\circ}$ ,  $110^{\circ}$ ,  $90^{\circ}$
- 9. 4 cm
- $10.\,90^{\circ}$ ,  $100^{\circ}$ ,  $130^{\circ}$ ,  $40^{\circ}$
- 11. P, F, P
- 12.70

## GRUPA F

- 1. F, F, P, F
- 2. A
- 3.
- 4. A
- $5.25^{\circ}, 90^{\circ}, 65^{\circ}$
- 6.  $\alpha = 60^{\circ}$ ,  $\beta = 20^{\circ}$ ,  $\gamma = 70^{\circ}$

- 7.  $15 \, \text{cm}^2$
- 8.  $70^{\circ}$ ,  $90^{\circ}$ ,  $110^{\circ}$ ,  $90^{\circ}$
- 9. 20 cm
- 10. 90°, 130°, 115°, 25°
- 11. F, P, P
- 12.70

## GRUPA G

- 1. F, F, P, F
- 2. D
- 3.
- 4. C
- 5. 70°, 90°, 20°
- 6.  $\alpha = 65^{\circ}$ ,  $\beta = 24^{\circ}$ ,  $\gamma = 65^{\circ}$
- $7.\ 10\ cm^2$
- 8. 50°, 90°, 130°, 90°
- 9. 12 cm
- 10.90°, 60°, 150°, 60°
- 11. P, P, P
- 12.48

### GRUPA H

- 1. P, P, F, F
- 2. C
- 3.
- 4. C
- 5. 35°, 90°, 55°
- 6.  $\alpha = 30^{\circ}$ ,  $\beta = 28^{\circ}$ ,  $\gamma = 45^{\circ}$
- 7.  $10 \, \text{cm}^2$
- 8.  $40^{\circ}$ ,  $90^{\circ}$ ,  $140^{\circ}$ ,  $90^{\circ}$
- 9. 10 cm
- 10. 90°, 80°, 140°, 50°
- 11. F, F, F
- 12.54

# GRUPA I

- 1. F, P, P, P
- 2. C
- 3.

- 4. D
- $5.60^{\circ}, 90^{\circ}, 30^{\circ}$
- 6.  $\alpha = 55^{\circ}$ ,  $\beta = 30^{\circ}$ ,  $\gamma = 60^{\circ}$
- $7.21\,\text{cm}^2$
- 8.  $70^{\circ}$ ,  $90^{\circ}$ ,  $110^{\circ}$ ,  $90^{\circ}$
- 9. 22 cm
- $10.\ 90^{\circ}$ ,  $140^{\circ}$ ,  $110^{\circ}$ ,  $20^{\circ}$
- 11. P, F, P
- 12.54

# GRUPA J

- 1. P, F, F, P
- 2. B
- 3.
- 4. D
- 5. 25°, 90°, 65°
- 6.  $\alpha = 25^{\circ}$ ,  $\beta = 32^{\circ}$ ,  $\gamma = 40^{\circ}$
- 7.  $14 \text{ cm}^2$
- 8. 50°, 90°, 130°, 90°
- 9. 14 cm
- $10.\ 90^{\circ},\ 40^{\circ},\ 160^{\circ},\ 70^{\circ}$
- 11. F, P, P
- 12.70