

3

2020

2017
15

2

3

3

1

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3

1

1987

3

+

3

3

1

1

2

3

1

$$\frac{\tan \alpha}{\tan \beta}$$

4

85.2m

85.7m

$$\frac{(\quad)}{2 \quad 1}$$

A4

4

A4

$$\frac{\sin \alpha}{\sin(\quad)}$$

5

$$\frac{(\quad)}{2 \quad 1}$$

$$\frac{\sin \alpha}{\sin(\quad)}$$

3

1 2

2m

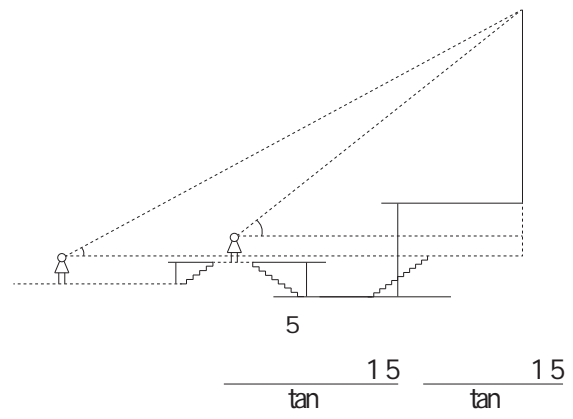
1.62m.

1

	α /m	β /m	/m
1	0.656	0.709	67.224
2	0.667	0.735	69.796
3	0.679	0.763	70.608

2

	α /m	β /m	/m	/m
1	29.0°	25.5°	19.82	69.398
2	26.5°	25.5°	6.16	68.760
3	30.0°	27.0°	15.86	70.409



651 m

1.5m

69.37 m

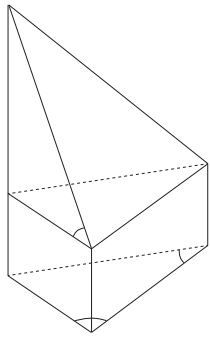
25.4m

01m

69.37m

64.5m

31.6m



6

6

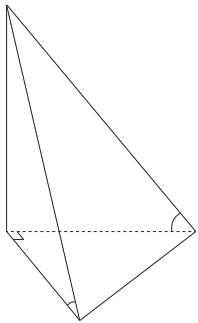
7

64.81 m
64.80 m

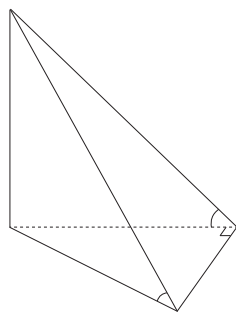
$$\frac{\tan \tan}{\sqrt{\tan^2 \tan^2}}$$

8

$$\frac{\tan \tan}{\sqrt{\tan^2 \tan^2}}$$



7



8

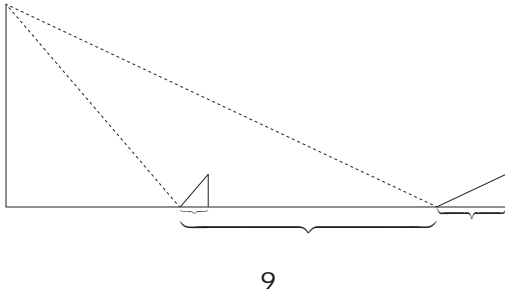
3₃

Phyphox

1888m

189m

9



9

3

3

	/m	/m	()/m	/m
1	162	78	1.95	64.8
2	162	83	2.10	64.0
3	162	70	1.72	65.9

649m

3

1

1

2

3

2

1

2

2

2

3

3

3

4

2

2

5

1

1

A4

6

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2

1
2017 2020 M.
2020

2
J.
2020 5 13-19.

3
J.
2020 6 13-16 31.

4
A4
J.
2018 11 32-34.



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