

FIGURE 7

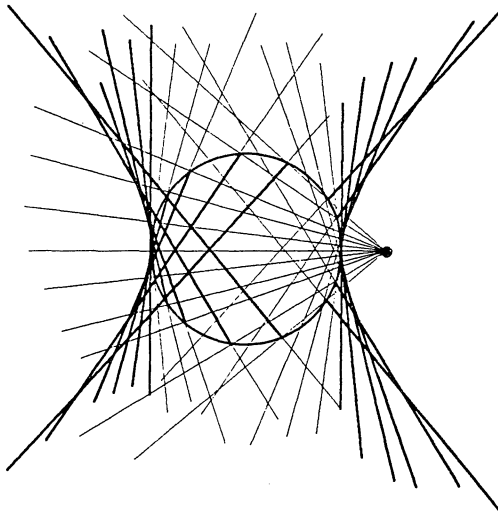


FIGURE 8

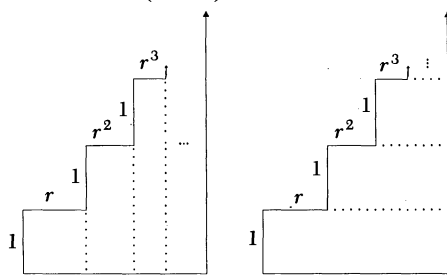
**Acknowledgement** We acknowledge important suggestions by Doris Schattschneider, who also helped us find the references.

REFERENCES

1. Edwards A. Bowser, *An Elementary Treatise on Analytic Geometry*, Van Nostrand Reinhold Co. Inc., New York, 1895.
2. Alfred S. Posamentier and Jay Stapelman, *Teaching Secondary School Mathematics*, 3rd edition, 1990, pp. 447–450.
3. Robert C. Yates, *Curves and Their Properties*, National Council of Teachers of Mathematics, Reston, VA, 1974. Reprint of 1952 edition, p. 50.

Proof Without Words: Gabriel’s Staircase

$$\sum_{k=1}^{\infty} kr^k = \frac{r}{(1-r)^2} \quad \text{for } 0 < r < 1$$



$$\sum_{k=1}^{\infty} kr^k = \sum_{k=1}^{\infty} \sum_{i=k}^{\infty} r^i = \frac{r}{(1-r)^2}$$

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