Star templates - answers

Worked answers / Keep separate from the student sheet.

1. A 5-point star alternates between outer radius 40 mm and inner radius 13 mm. How many outline vertices and what radius ratio?

10 alternating vertices; inner/outer ratio = 0.325. Matching opposite lobes should follow the same construction.

2. A 6-point star alternates between outer radius 40 mm and inner radius 16 mm. How many outline vertices and what radius ratio?

12 alternating vertices; inner/outer ratio = 0.4. Matching opposite lobes should follow the same construction.

3. A 7-point star alternates between outer radius 40 mm and inner radius 19 mm. How many outline vertices and what radius ratio?

14 alternating vertices; inner/outer ratio = 0.475. Matching opposite lobes should follow the same construction.

4. A 8-point star alternates between outer radius 40 mm and inner radius 22 mm. How many outline vertices and what radius ratio?

16 alternating vertices; inner/outer ratio = 0.55. Matching opposite lobes should follow the same construction.

5. A 9-point star alternates between outer radius 40 mm and inner radius 25 mm. How many outline vertices and what radius ratio?

18 alternating vertices; inner/outer ratio = 0.625. Matching opposite lobes should follow the same construction.

6. A 10-point star alternates between outer radius 40 mm and inner radius 28 mm. How many outline vertices and what radius ratio?

20 alternating vertices; inner/outer ratio = 0.7. Matching opposite lobes should follow the same construction.

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