Draw Orion: Plot, Label, and Connect the Constellation

Original task 1 / independent drawing and calculation

Task 1

Plot Betelgeuse (2.0, 6.0) and Bellatrix (6.0, 6.0). Label both with magnitudes 0.5 and 1.6. Draw the shoulder line and measure its horizontal length.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Draw Orion: Plot, Label, and Connect the Constellation

Original task 2 / independent drawing and calculation

Task 2

Plot Saiph (3.0, 2.0) and Rigel (6.5, 2.0). Label with magnitudes 2.1 and 0.1. Connect them to the belt ends Alnitak (3.5, 4.5) and Mintaka (5.5, 4.5). Describe the two connecting lines.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Draw Orion: Plot, Label, and Connect the Constellation

Original task 3 / independent drawing and calculation

Task 3

Using the example star list, plot all seven stars on a grid. Connect them with a documented key. Check belt spacing and shoulder width.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Draw Orion: Plot, Label, and Connect the Constellation

Original task 4 / independent drawing and calculation

Task 4

Redraw the constellation on a grid scaled by 0.5. State new coordinates for Betelgeuse and Rigel and check the new shoulder width.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Full drawing sheet / reusable blank workspace

Reusable full drawing sheet for Tasks 1 to 4. Print another copy when needed. Keep all original task measurements; if a task specifies larger paper, use that paper size.