Compare Cubic and Reciprocal Graph Shapes: Paired Plotting Worksheet

Original task 1 / independent drawing and calculation

Task 1

Compare y = x^3 and y = 1/x on one grid using x-values -2, -1, 1, 2. State the asymptotes and whether each curve crosses the x-axis.

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.

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Original task 2 / independent drawing and calculation

Task 2

Compare y = x^3 - 4x and y = 2/x using x-values -2, -1, 1, 2. Identify any turning points and asymptotes.

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.

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Original task 3 / independent drawing and calculation

Task 3

Compare y = x^3 + x and y = -1/x using x-values -2, -1, 1, 2. Describe end behavior and asymptote behavior.

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.

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Original task 4 / independent drawing and calculation

Task 4

Compare y = x^3 - 2x and y = 3/x using x-values -3, -1, 1, 3. State intercepts and asymptotes.

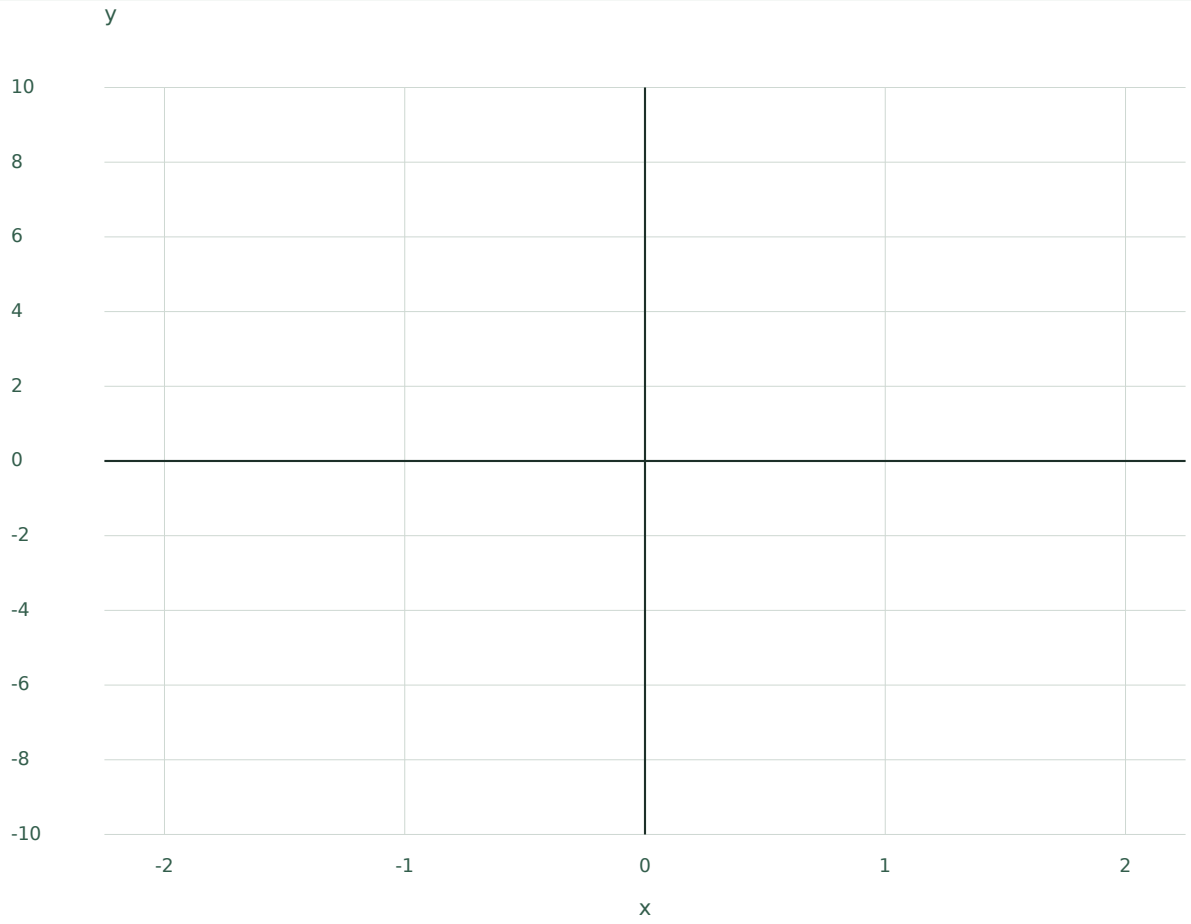
Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

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.

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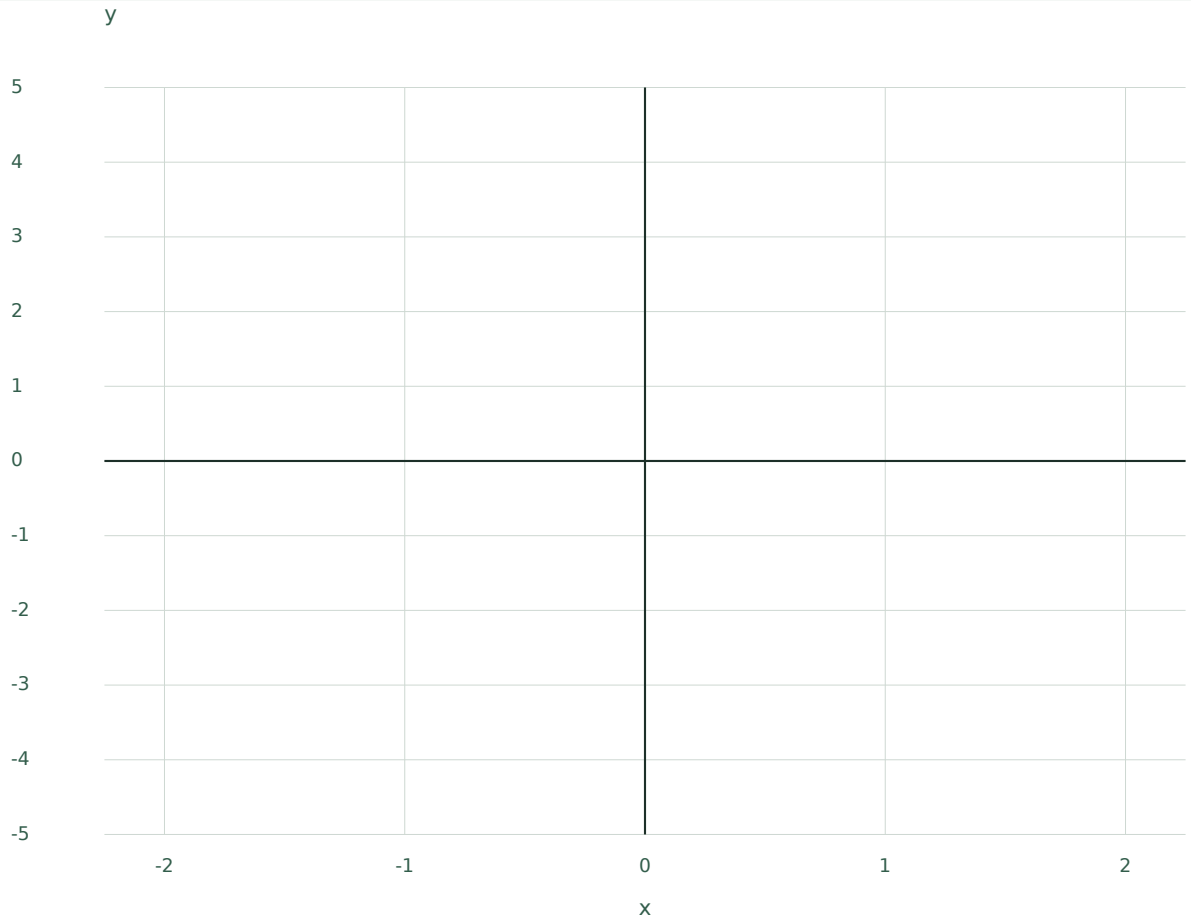
Task 1 / given or blank workspace



Student plotting workspace. No solution has been filled in.

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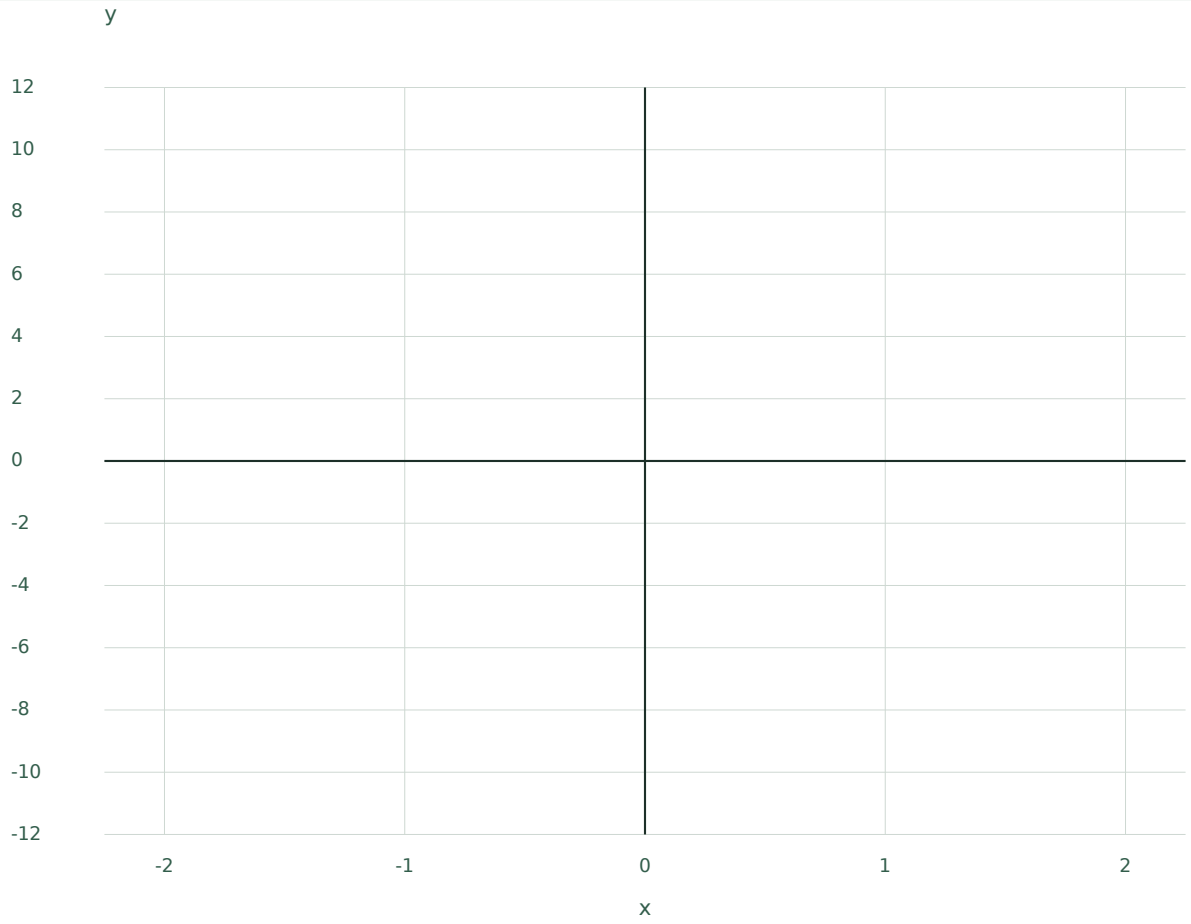
Task 2 / given or blank workspace



Student plotting workspace. No solution has been filled in.

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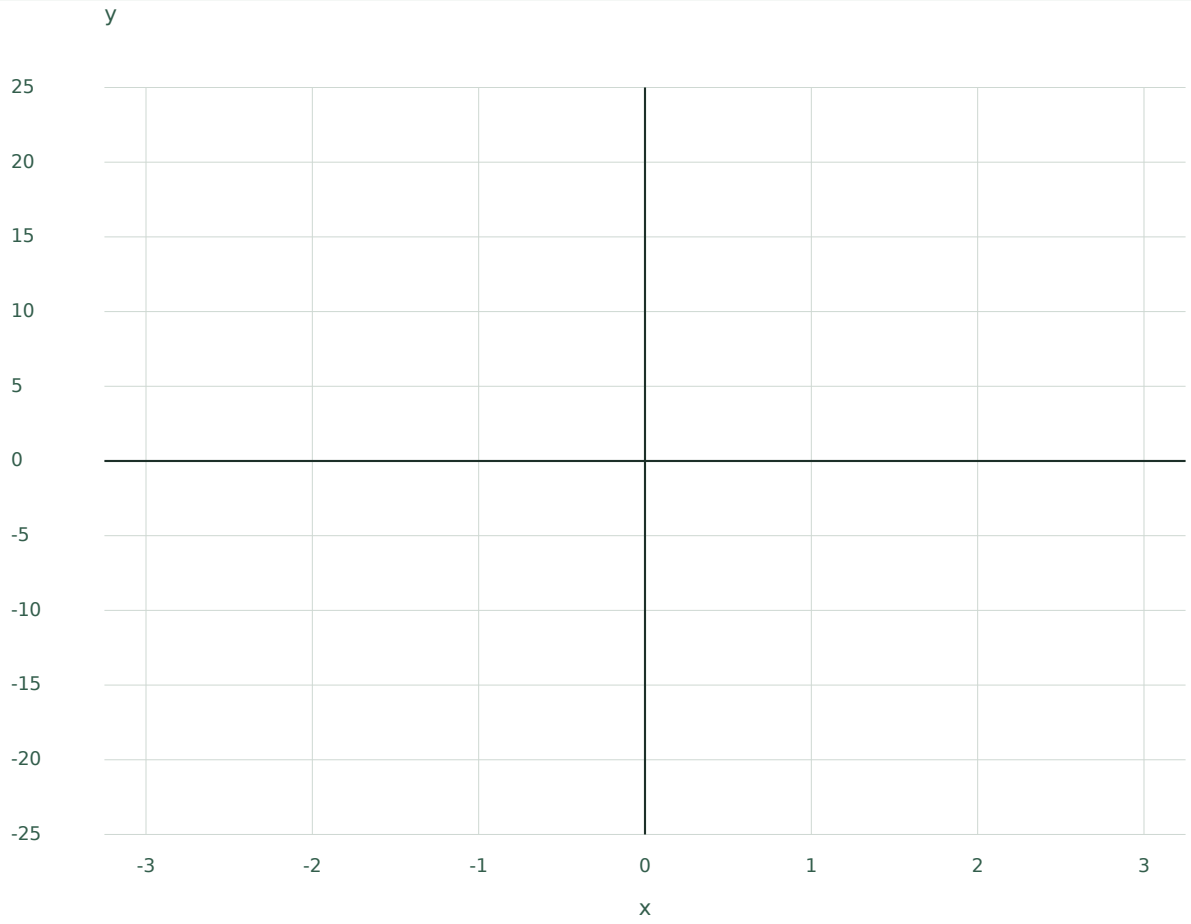
Task 3 / given or blank workspace



Student plotting workspace. No solution has been filled in.

Compare Cubic and Reciprocal Graph Shapes: Paired Plotting Worksheet

Task 4 / given or blank workspace



Student plotting workspace. No solution has been filled in.