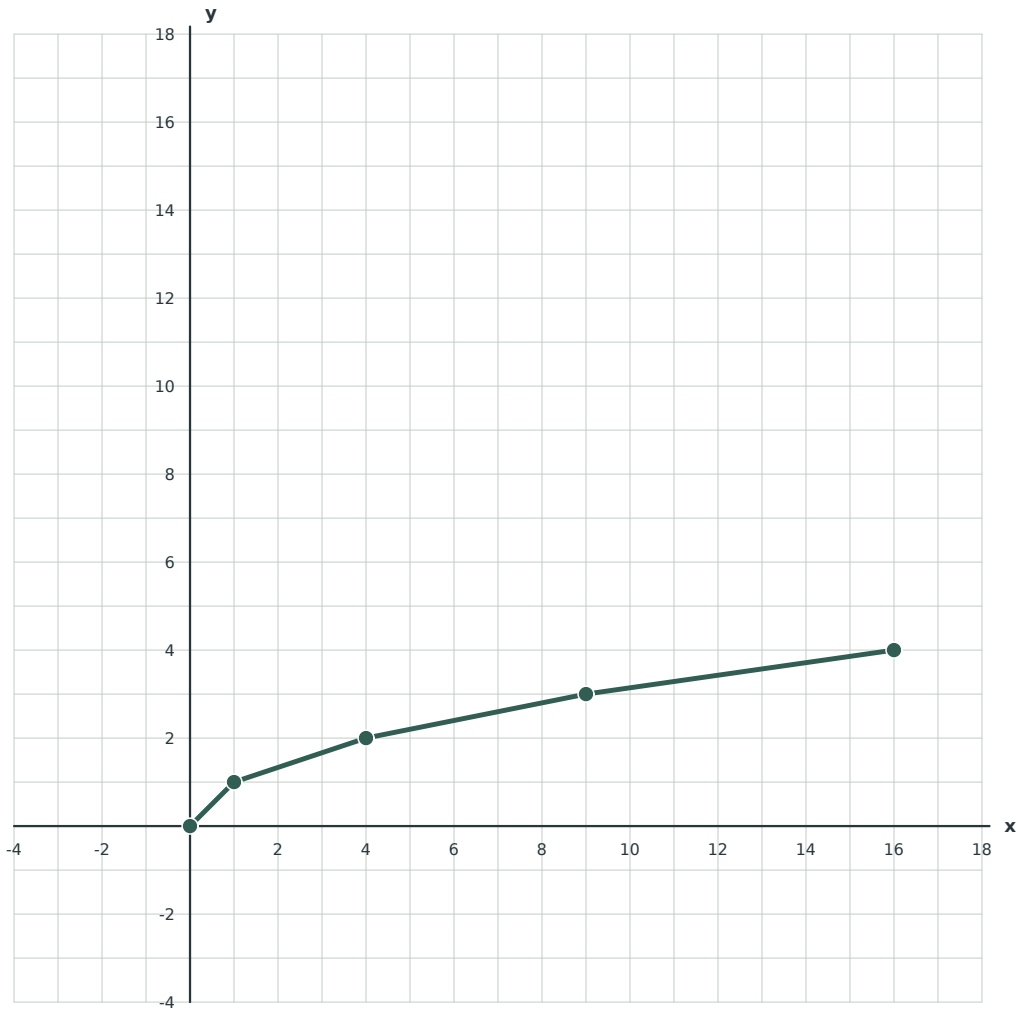
Basic square root

Use y = a√(x-h)+k. The endpoint is the first domain point. Plot the supplied perfect-square samples and join them with a smooth one-sided curve.

y = 1√(x - (0)) + (0). x values: 0, 1, 4, 9, 16.



1. Locate the endpoint. Endpoint (0,0).

2. Complete the sample values. (0,0); (1,1); (4,2); (9,3); (16,4)

3. State the direction of the curve. Opens upward.

Original practice data / coordinate units, not ruler measurements / physical printing not tested

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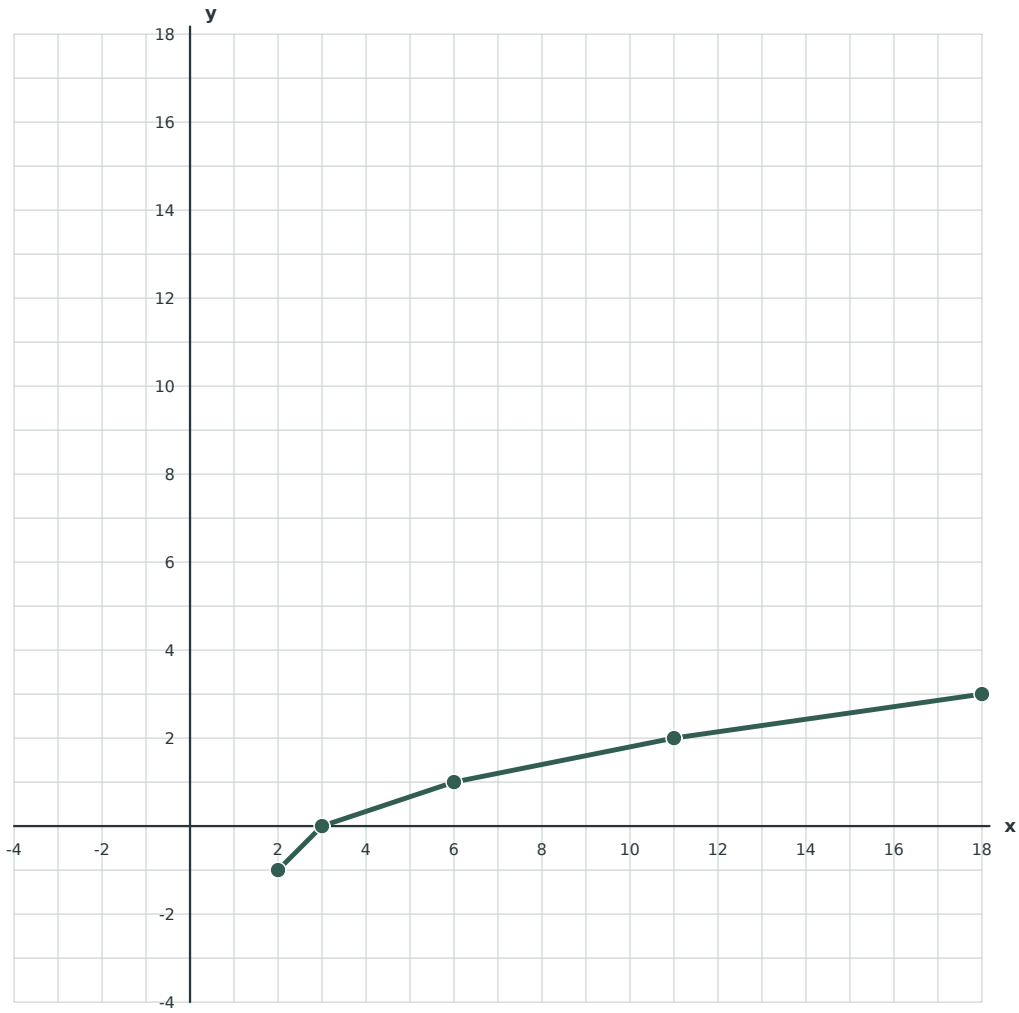
Shift right

Use y = a√(x-h)+k. The endpoint is the first domain point. Plot the supplied perfect-square samples and join them with a smooth one-sided curve.

y = 1√(x - (2)) + (-1). x values: 2, 3, 6, 11, 18.



1. Locate the endpoint. Endpoint (2,-1).

2. Complete the sample values. (2,-1); (3,0); (6,1); (11,2); (18,3)

3. State the direction of the curve. Opens upward.

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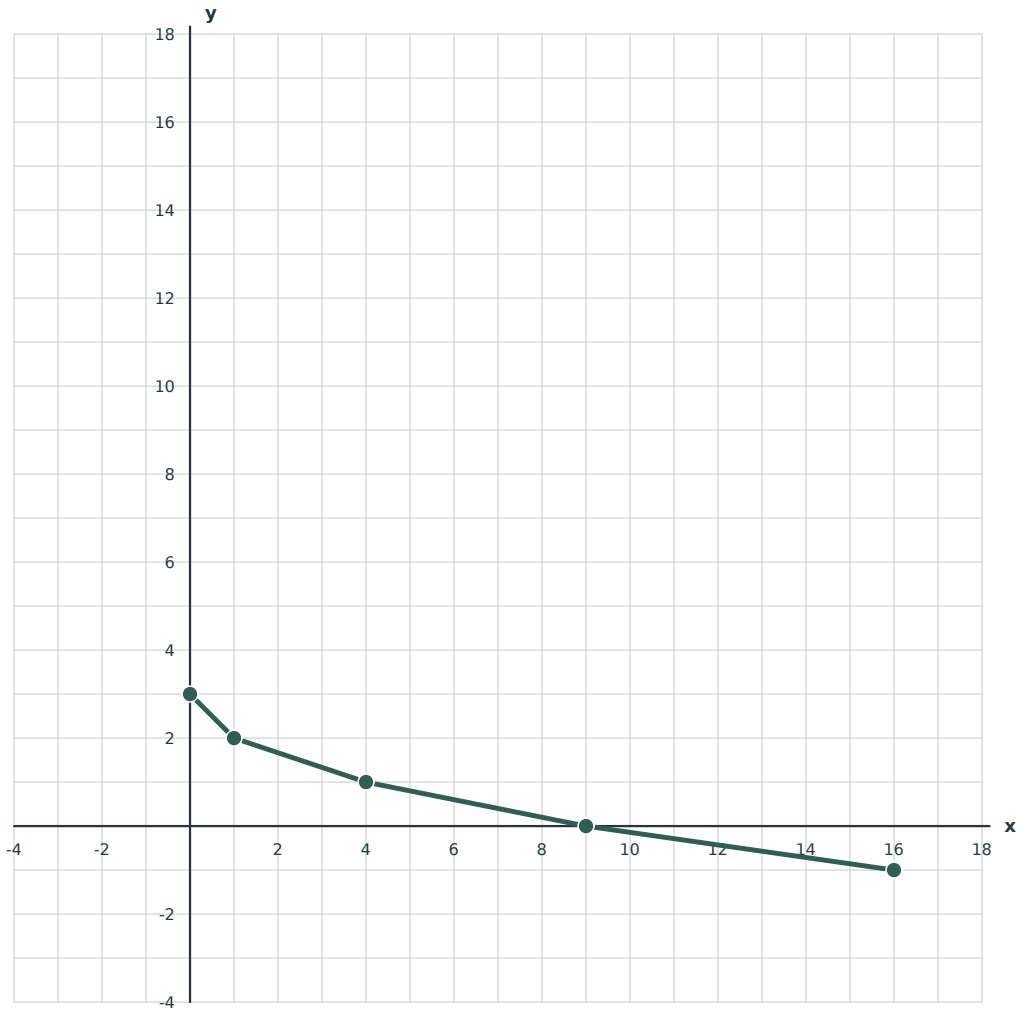
Reflected root

Use y = a√(x-h)+k. The endpoint is the first domain point. Plot the supplied perfect-square samples and join them with a smooth one-sided curve.

y = -1√(x - (0)) + (3). x values: 0, 1, 4, 9, 16.



1. Locate the endpoint. Endpoint (0,3).

2. Complete the sample values. (0,3); (1,2); (4,1); (9,0); (16,-1)

3. State the direction of the curve. Reflects downward.

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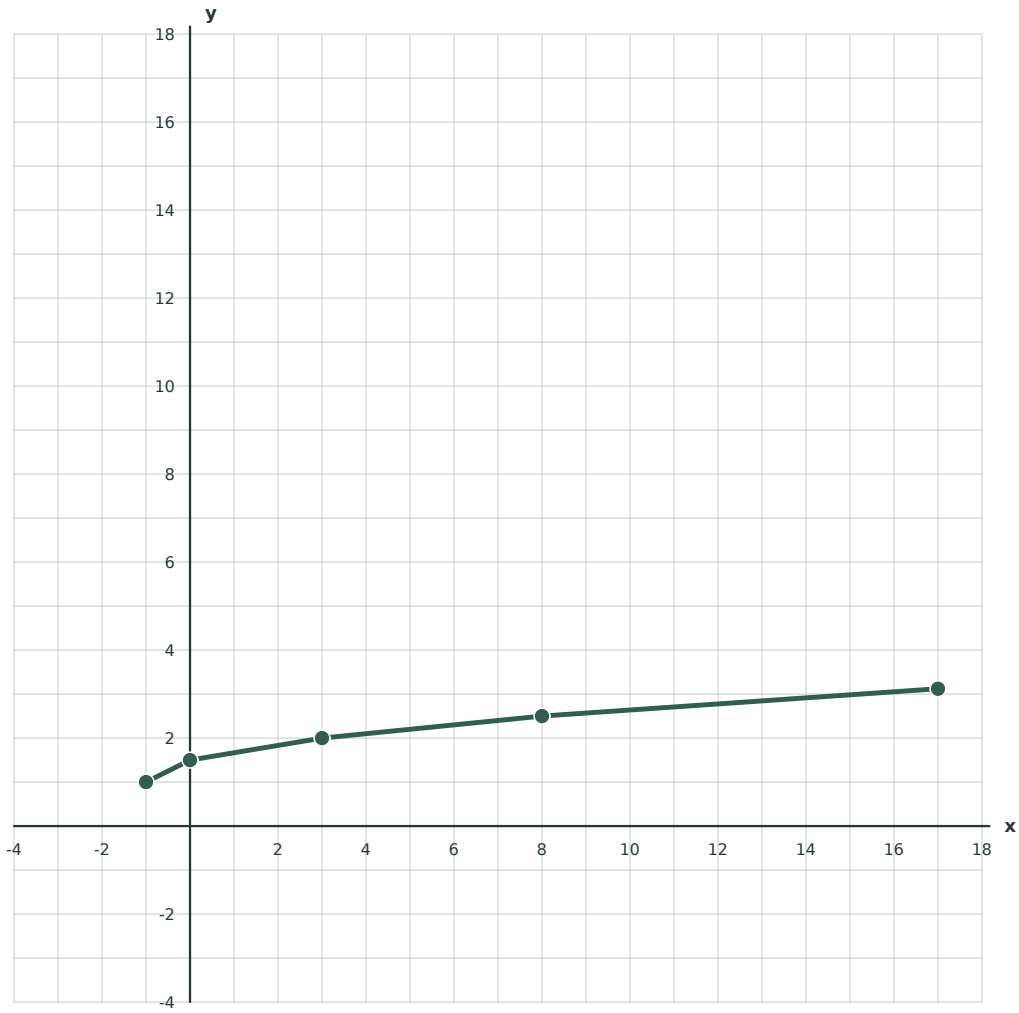
Narrower rise

Use y = a√(x-h)+k. The endpoint is the first domain point. Plot the supplied perfect-square samples and join them with a smooth one-sided curve.

y = 1/2√(x - (-1)) + (1). x values: -1, 0, 3, 8, 17.



1. Locate the endpoint. Endpoint (-1,1).

2. Complete the sample values. (-1,1); (0,3/2); (3,2); (8,5/2); (17,78033/25000)

3. State the direction of the curve. Opens upward.

Original practice data / coordinate units, not ruler measurements / physical printing not tested

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