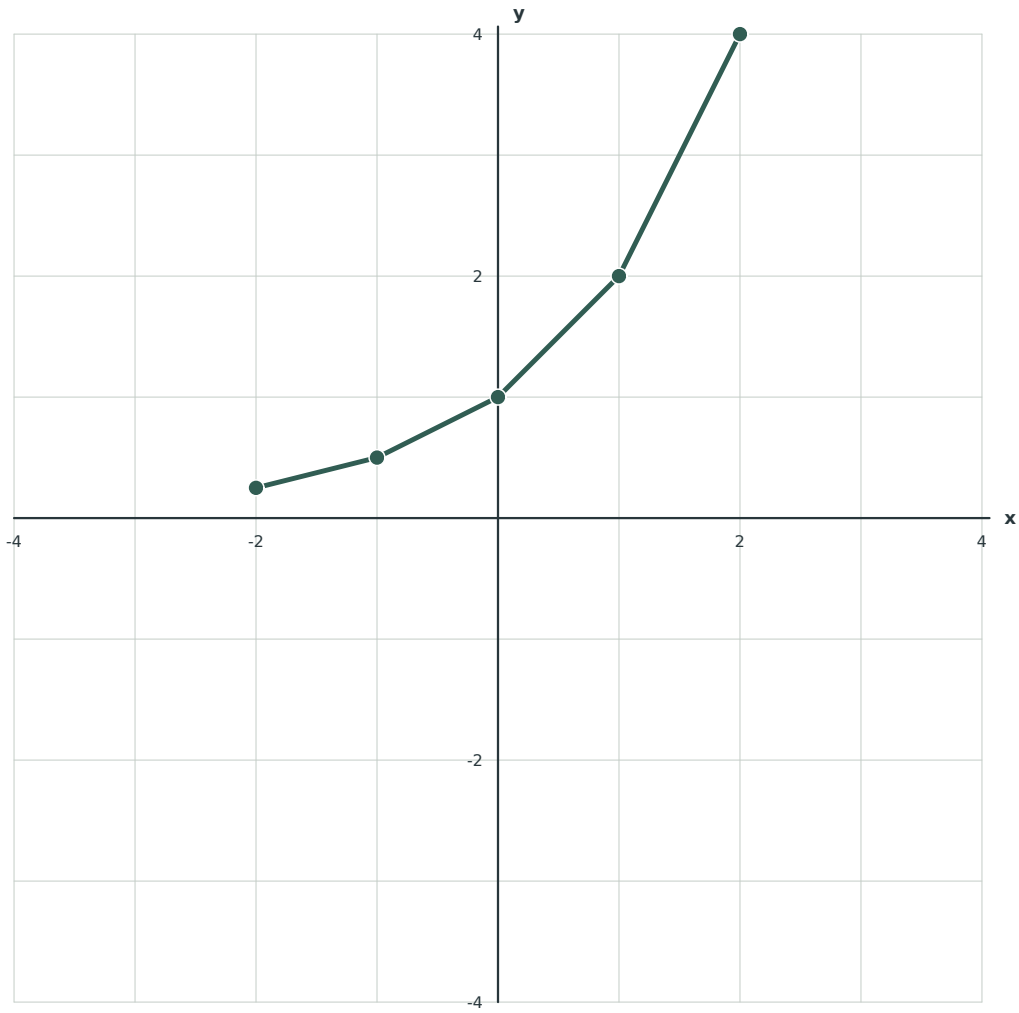
Growth from one

Use y = a·b^(x-h)+k. Plot the supplied table in order, then sketch a smooth curve. The visible window is a finite sample.

y = 1·2^(x - (0)) + (0). x values: -2, -1, 0, 1, 2.



1. Complete the table values. y values: 1/4, 1/2, 1, 2, 4.

2. Identify the horizontal and vertical shifts. Horizontal shift h=0; vertical shift k=0.

3. Growth or decay? Growth because base > 1.

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

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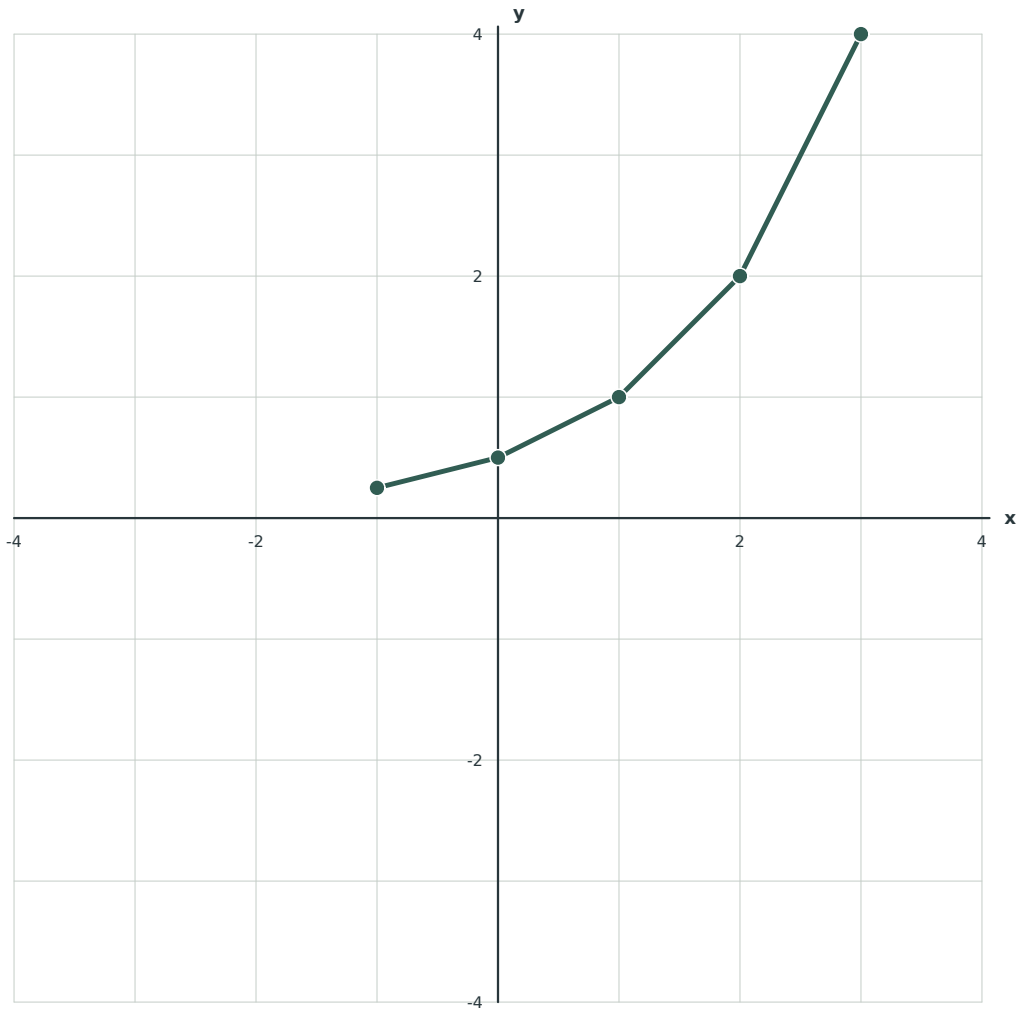
Growth with a shift

Use y = a·b^(x-h)+k. Plot the supplied table in order, then sketch a smooth curve. The visible window is a finite sample.

y = 1·2^(x - (1)) + (0). x values: -1, 0, 1, 2, 3.



1. Complete the table values. y values: 1/4, 1/2, 1, 2, 4.

2. Identify the horizontal and vertical shifts. Horizontal shift h=1; vertical shift k=0.

3. Growth or decay? Growth because base > 1.

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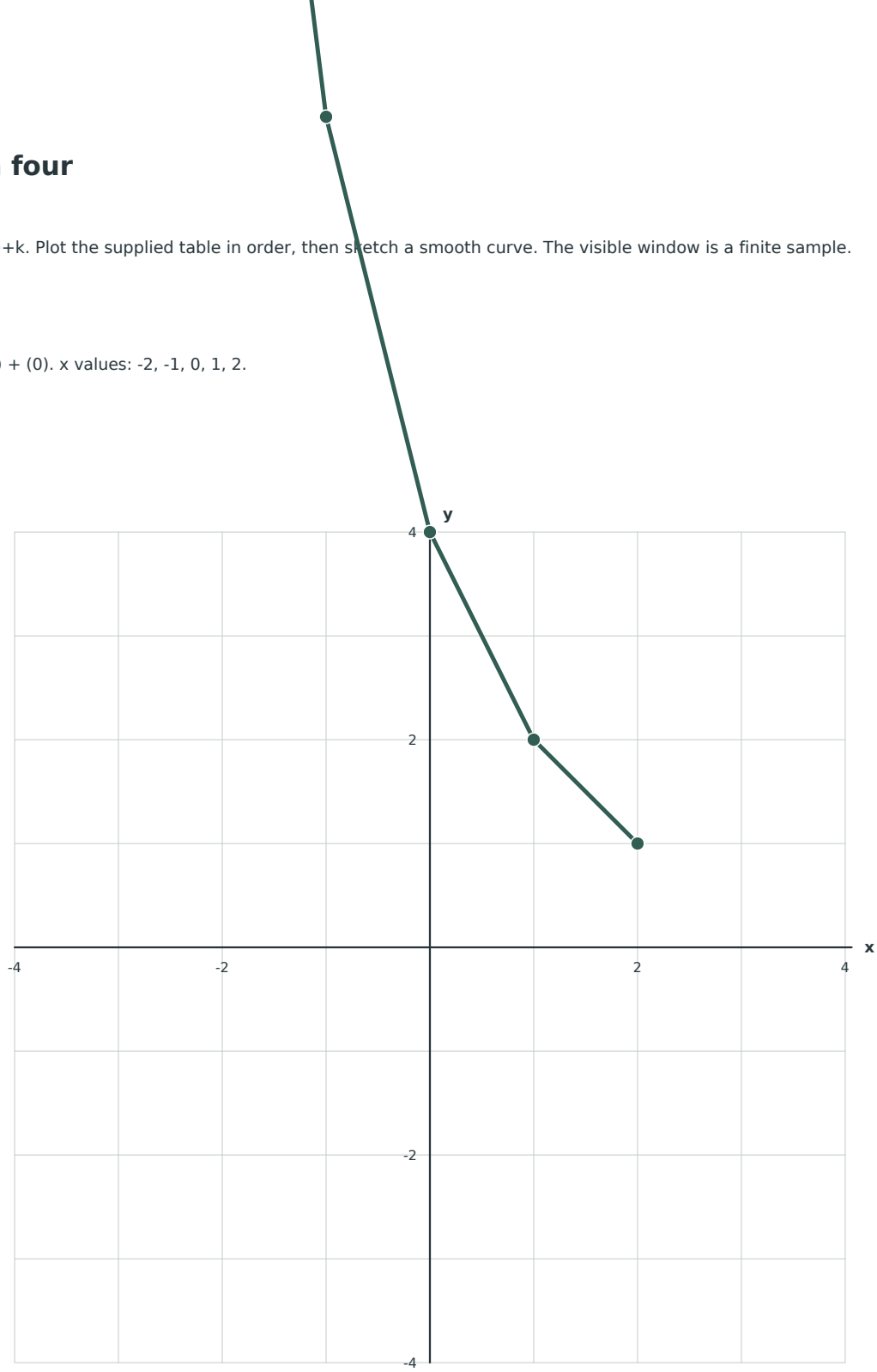
Decay from four

Use y = a·b^(x-h)+k. Plot the supplied table in order, then sketch a smooth curve. The visible window is a finite sample.

y = 4·1/2^(x - (0)) + (0). x values: -2, -1, 0, 1, 2.



1. Complete the table values. y values: 16, 8, 4, 2, 1.

2. Identify the horizontal and vertical shifts. Horizontal shift h=0; vertical shift k=0.

3. Growth or decay? Decay because 0 < base < 1.

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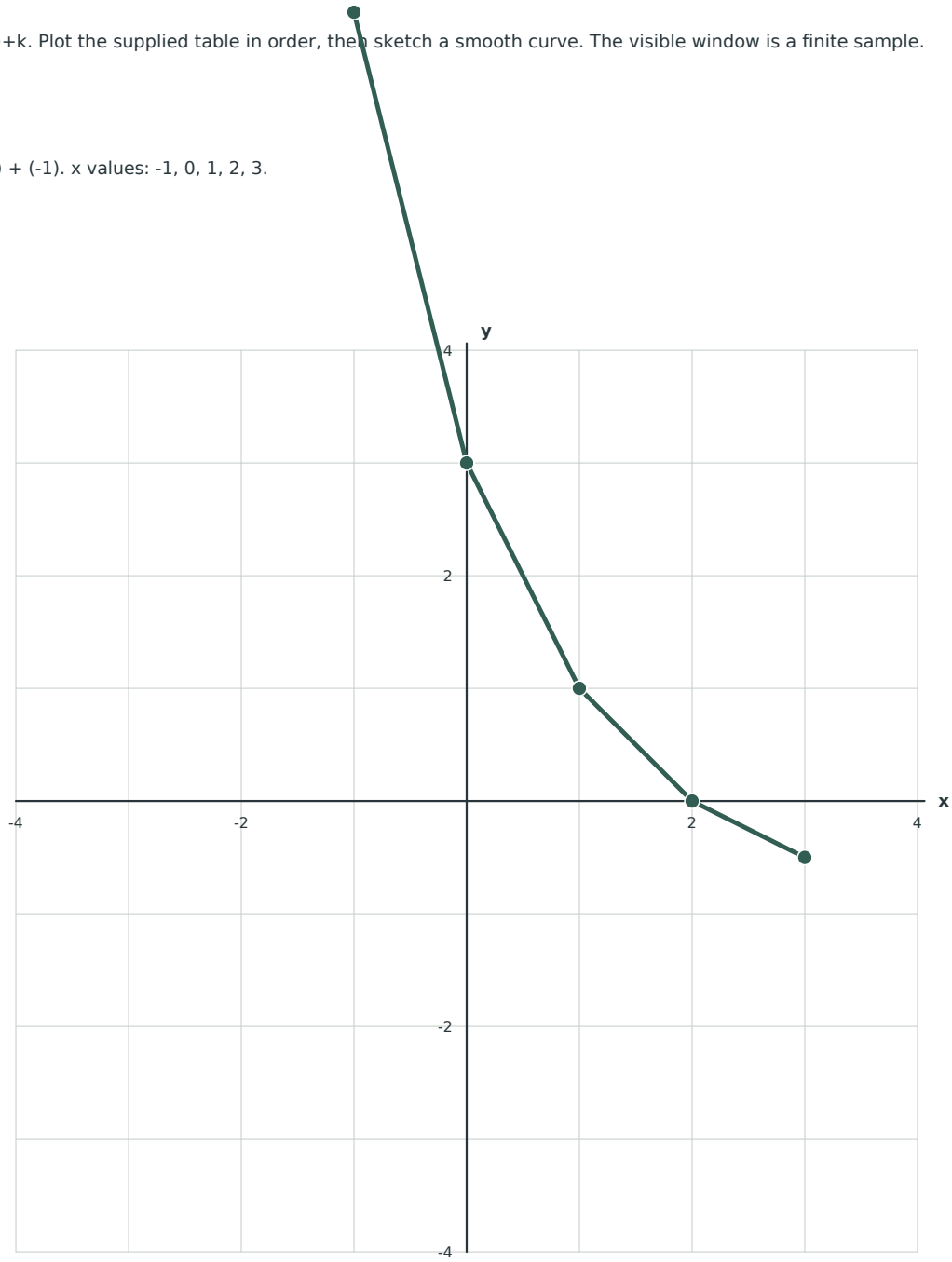
Shifted decay

Use y = a·b^(x-h)+k. Plot the supplied table in order, then sketch a smooth curve. The visible window is a finite sample.

y = 2·1/2^(x - (1)) + (-1). x values: -1, 0, 1, 2, 3.



1. Complete the table values. y values: 7, 3, 1, 0, -1/2.

2. Identify the horizontal and vertical shifts. Horizontal shift h=1; vertical shift k=-1.

3. Growth or decay? Decay because 0 < base < 1.

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

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