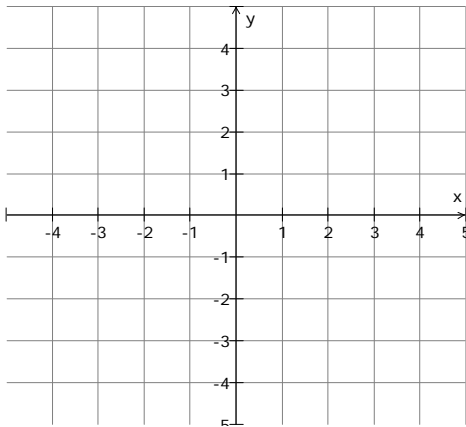


Graphs of Functions

For each of the following functions:

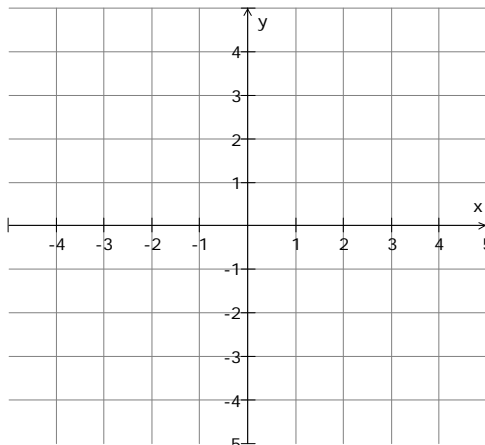
- Draw a sketch of the each graph without using the graphing calculator. Check your answer by using the graphing calculator.
- Create a set of table values for each function in the neighborhood of 1:
 $0.8 \leq x \leq 1.3$.
- Describe whether the function is increasing, decreasing, or not changing when $x = 1$.
- If the function is increasing or decreasing at $x = 1$, use the graph and/or table values to decide if the function is increasing or decreasing at a rate that is slow or fast.

1. $y = 2^{-x}$



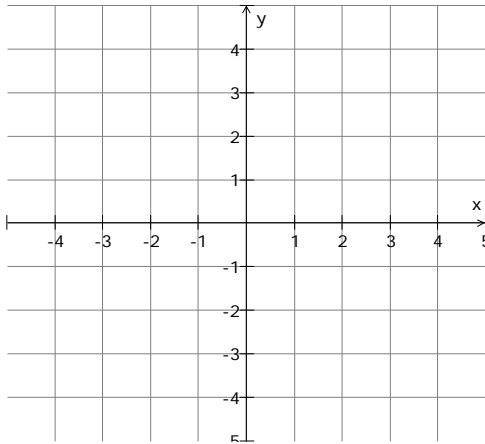
| x | y |
|---|---|
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| | |

2. $y = 2 \sin\left(\frac{\pi}{2}x\right)$



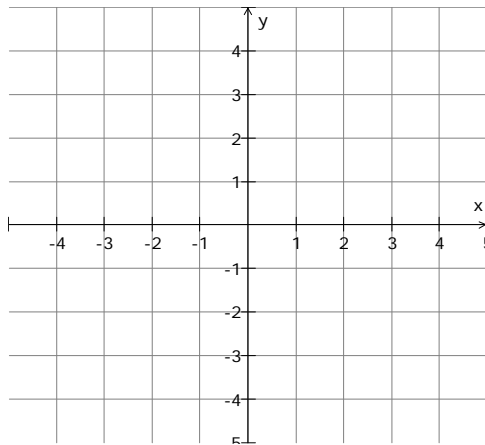
| x | y |
|---|---|
| | |
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$$3. y = \frac{1}{2}x^2 + 1\frac{1}{2}x$$



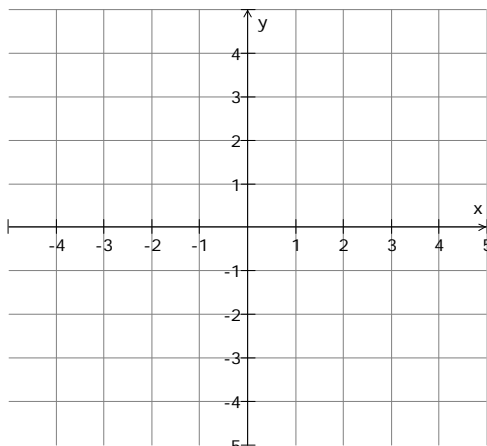
| x | y |
|---|---|
| | |
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| | |

$$4. y = \sin(2\pi x)$$



| x | y |
|---|---|
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$$5. y = \left| \frac{1}{x} \right|$$



| x | y |
|---|---|
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