

Section 9.4 Worksheet

Name: _____

Identify the values of a , b , and c in the functions.

1.) $y = 3x^2 - 5x + 2$

2.) $y = -x^2 + 4x - 8$

3.) $y = -4x^2 + x$

4.) $y = x^2 - 4$

Identify the graph's axis of symmetry (AOS), vertex, and tell whether the graph opens up or down.

5.) $y = 3x^2 - 6x + 4$

6.) $y = -4x^2 + 8x + 2$

AOS: _____

AOS: _____

vertex: _____

vertex: _____

opens: _____

opens: _____

7.) $y = -2x^2$

8.) $y = 4x^2 + 1$

AOS: _____

AOS: _____

vertex: _____

vertex: _____

opens: _____

opens: _____

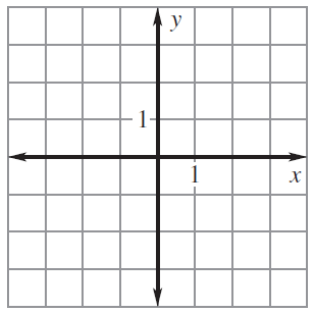
Graph the function by completing the table. Identify the graph's axis of symmetry (AOS), vertex, and tell whether the graph opens up or down.

9.) $y = 3x^2 + 3x - 2$

AOS: _____

vertex: _____

opens: _____



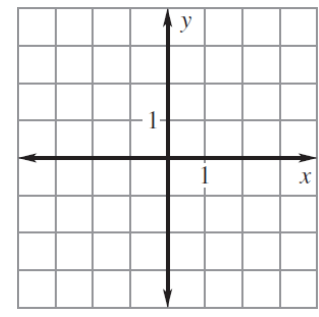
| | | | | | |
|---|--|--|--|--|--|
| x | | | | | |
| y | | | | | |

10.) $y = 5x^2 - 1$

AOS: _____

vertex: _____

opens: _____



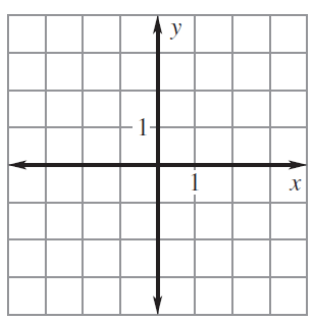
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|---|--|--|--|--|--|
| x | | | | | |
| y | | | | | |

11.) $y = -x^2 - 4x - 3$

AOS: _____

vertex: _____

opens: _____



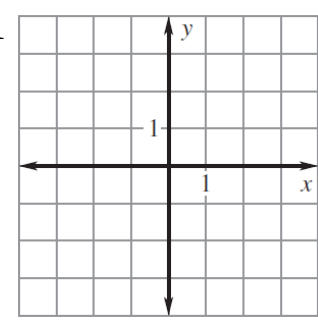
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|---|--|--|--|--|--|
| x | | | | | |
| y | | | | | |

12.) $y = -2x^2 + 4x - 1$

AOS: _____

vertex: _____

opens: _____



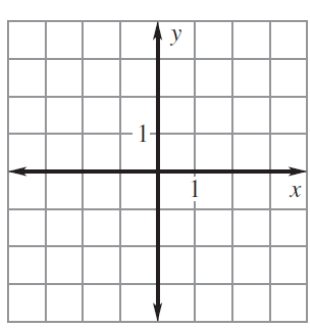
| | | | | | |
|---|--|--|--|--|--|
| x | | | | | |
| y | | | | | |

13.) $y = 3x^2$

AOS: _____

vertex: _____

opens: _____



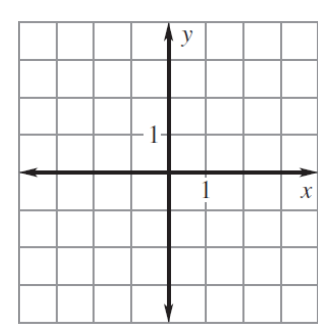
| | | | | | |
|---|--|--|--|--|--|
| x | | | | | |
| y | | | | | |

14.) $y = -x^2 - 4$

AOS: _____

vertex: _____

opens: _____



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