

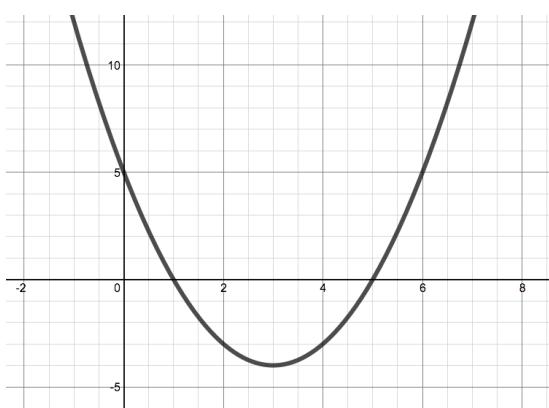


Quadratic Matching

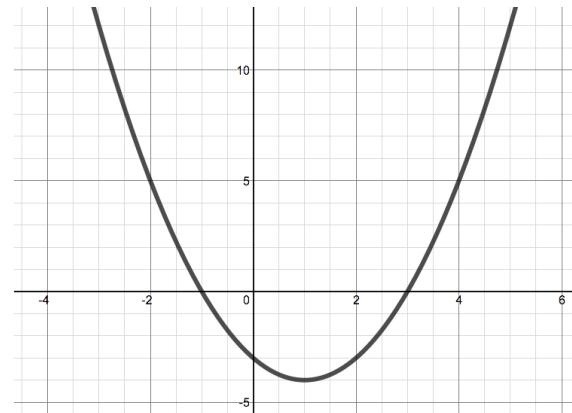
Can you match each graph to one of the statements (so that each graph is paired with a single statement)?

Assume that all the graphs have an equation of the form $y = ax^2 + bx + c$

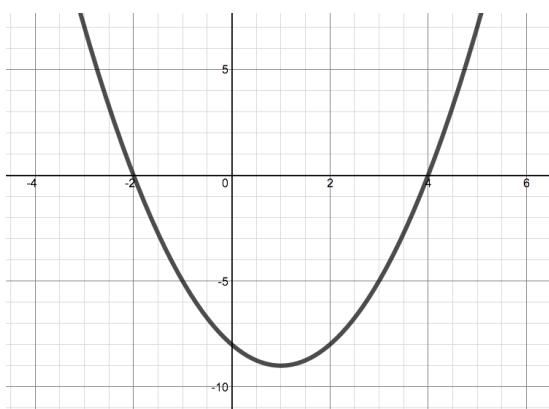
1.



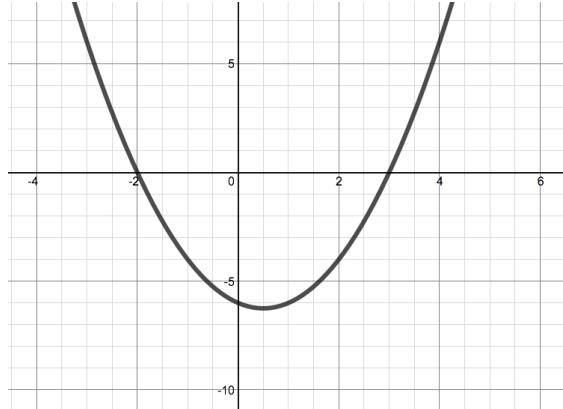
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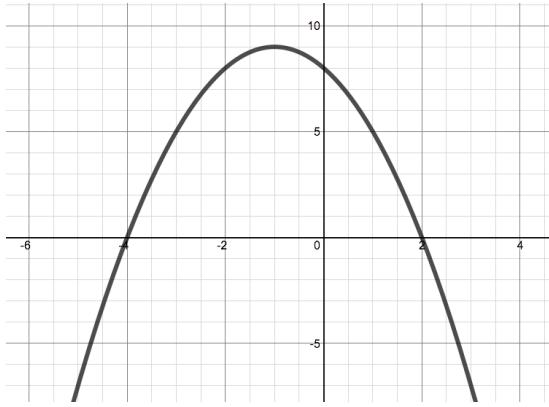
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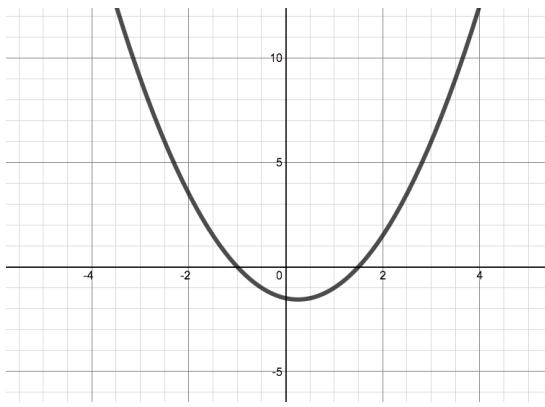
4.



5.

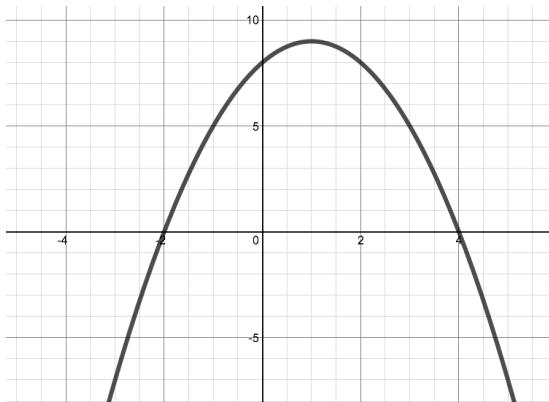


6.

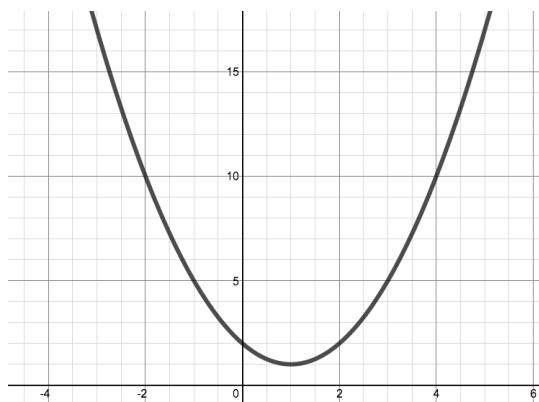




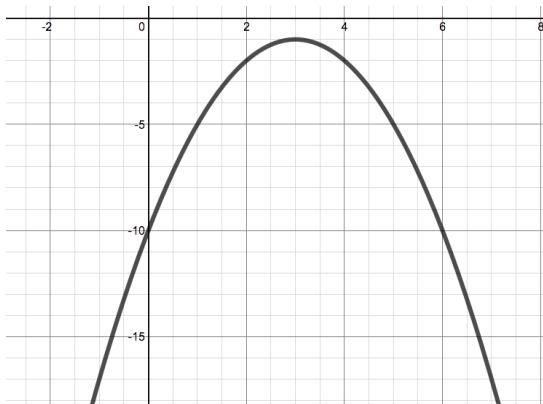
7.



8.



9.



- (a) The line of symmetry of this graph is $x=3$
- (b) This function has a non-integer root
- (c) The line of symmetry of this graph is $x=k$, where $k<0$
- (d) The y values for this graph are all greater than 0 (that is, $y>0$)
- (e) The vertex of this graph lies on the line $x=1$
- (f) The constant term of this function is -8 (that is, $c=-8$)
- (g) The sum of the roots of this function are 6
- (h) The points $(0,8)$ and $(2,8)$ both lie on this curve
- (i) The sum of the roots of this function is an odd number (that is, b is odd)