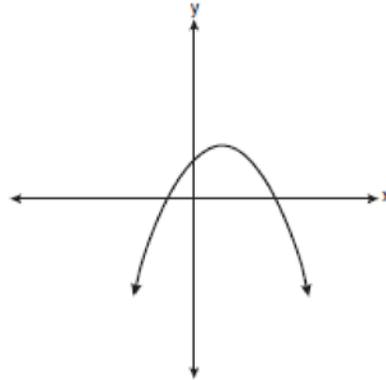


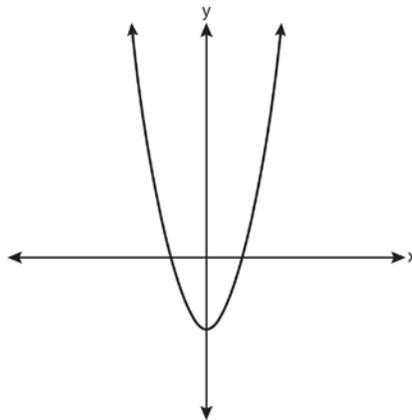
**F.LE.A.1: Families of Functions 4**

1 Which type of graph is shown in the diagram below?



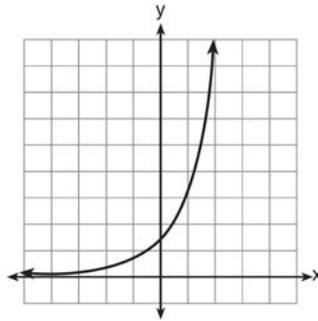
- 1) absolute value
- 2) exponential
- 3) linear
- 4) quadratic

2 Which type of function is represented by the graph shown below?



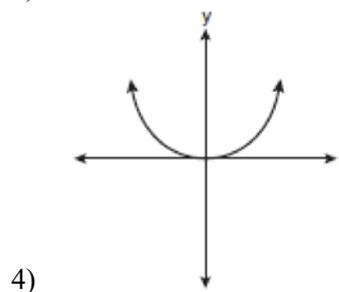
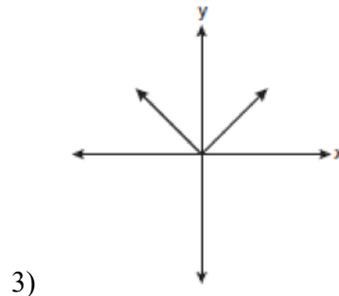
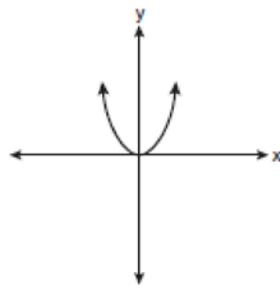
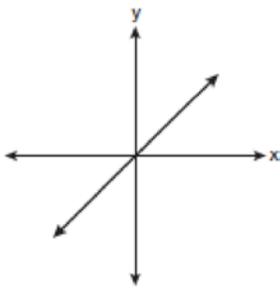
- 1) absolute value
- 2) exponential
- 3) linear
- 4) quadratic

3 Which type of function is graphed below?

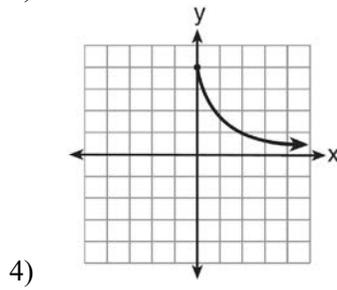
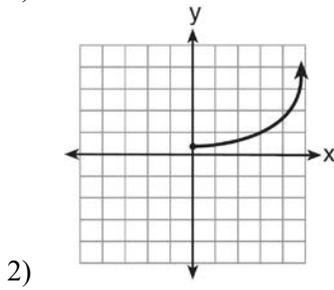
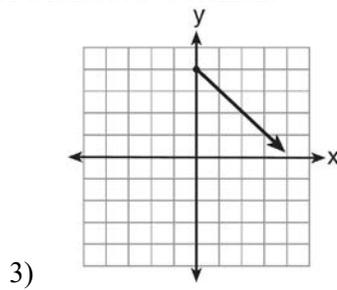
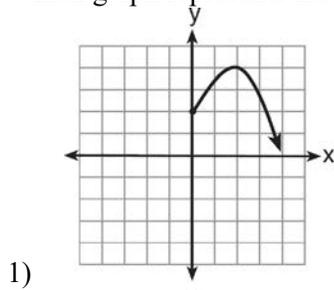


- 1) linear
- 2) quadratic
- 3) exponential
- 4) absolute value

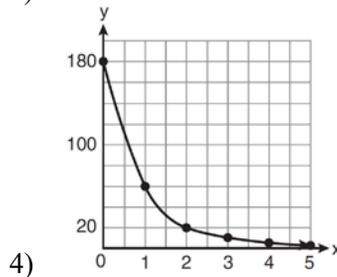
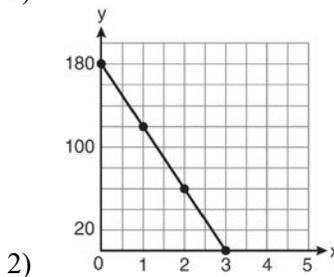
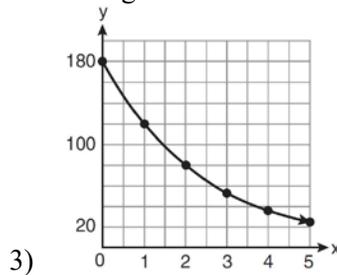
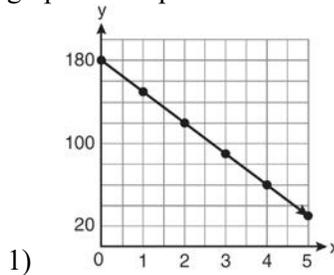
4 Which graph represents a linear function?



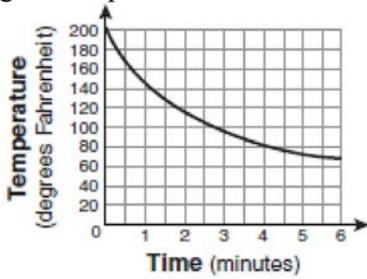
5 Which graph represents the exponential decay of a radioactive element?



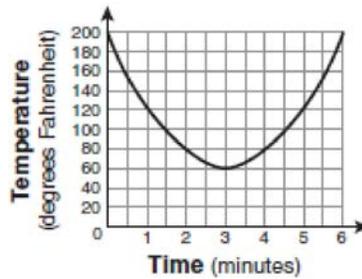
6 On January 1, a share of a certain stock cost \$180. Each month thereafter, the cost of a share of this stock decreased by one-third. If  $x$  represents the time, in months, and  $y$  represents the cost of the stock, in dollars, which graph best represents the cost of a share over the following 5 months?



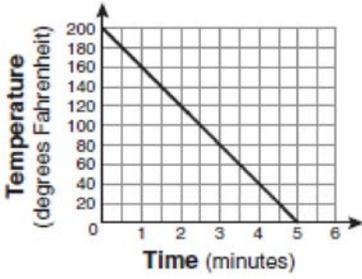
7 Antwaan leaves a cup of hot chocolate on the counter in his kitchen. Which graph is the best representation of the change in temperature of his hot chocolate over time?



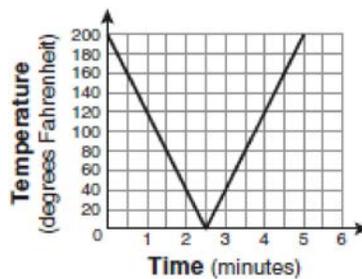
1)



3)

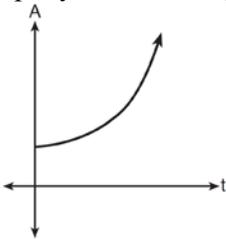


2)

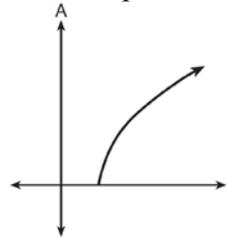


4)

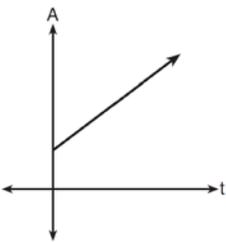
8 An investment is earning 5% interest compounded quarterly. The equation represents the total amount of money,  $A$ , where  $P$  is the original investment,  $r$  is the interest rate,  $t$  is the number of years, and  $n$  represents the number of times per year the money earns interest. Which graph could represent this investment over at least 50 years?



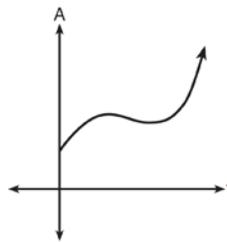
1)



3)

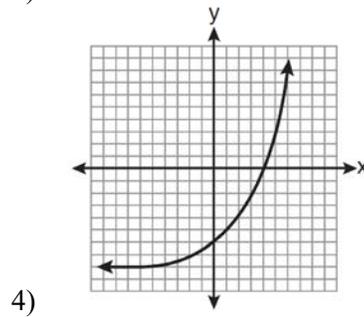
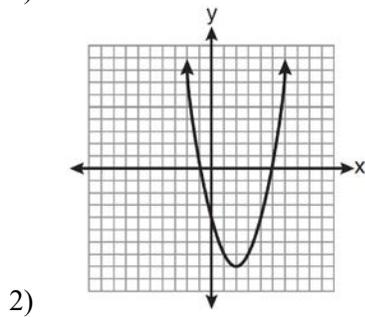
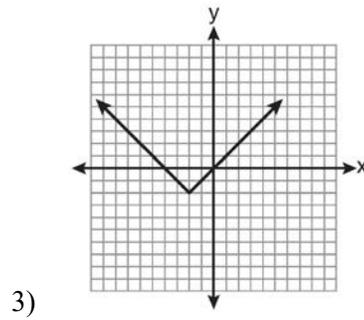
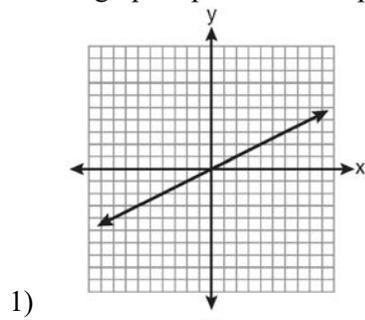


2)

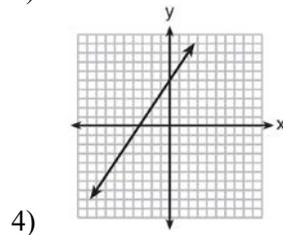
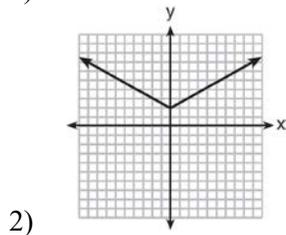
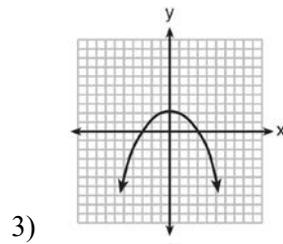
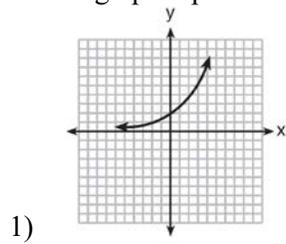


4)

9 Which graph represents an exponential equation?



10 Which graph represents an absolute value equation?



**F.LE.A.1: Families of Functions 4****Answer Section**

1	ANS: 4	REF: fall0717ia
2	ANS: 4	REF: 061111ia
3	ANS: 3	REF: 061318ia
4	ANS: 1	REF: 060801ia
5	ANS: 4	REF: 011423ia
6	ANS: 3	REF: 011119a2
7	ANS: 1	REF: 010905ia
8	ANS: 1	REF: 011505a2
9	ANS: 4	REF: 081025ia
10	ANS: 2	REF: 061423ia