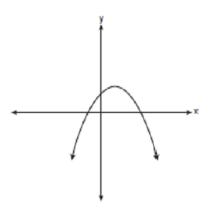
#### **Families of Functions**

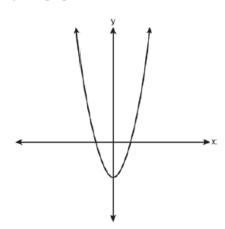
1 Which type of graph is shown in the diagram below?



- 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

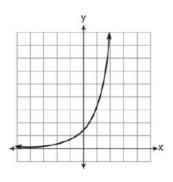
- 3) linear
- 4) quadratic

# **Answers**

1 ANS: 4

#### **Families of Functions**

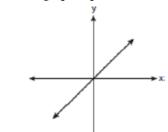
3 Which type of function is graphed below?



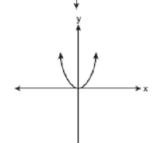
- 1) linear
- 2) quadratic

- 3) exponential
- 4) absolute value

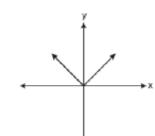
4 Which graph represents a linear function?



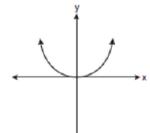
1)



2)



3)



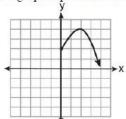
4)

# **Answers**

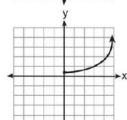
3 ANS: 3

#### **Families of Functions**

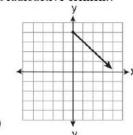
5 Which graph represents the exponential decay of a radioactive element?

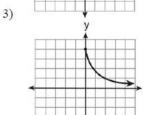






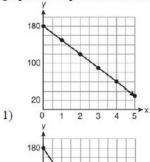
2)





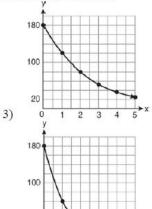
4)

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?



2)

100



45

# **Answers**

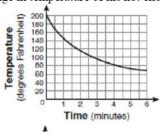
5 ANS: 4

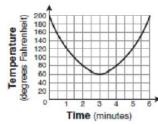
#### **Families of Functions**

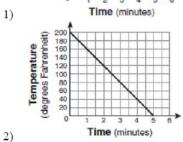
7 Antwaan leaves a cup of hot chocolate on the counter in his kitchen. Which graph is the best representation of the change in temperature of his hot chocolate over time?

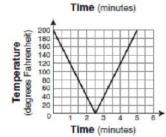
3)

4)

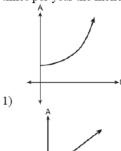


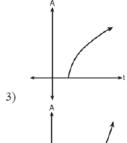


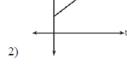




8 An investment is earning 5% interest compounded quarterly. The equation represents the total amount of money, *A*, where *P* is the original investment, *r* is the interest rate, *t* is the number of years, and *n* represents the number of times per year the money earns interest. Which graph could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





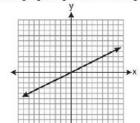


# **Answers**

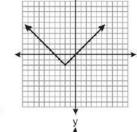
7 ANS: 1

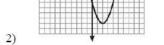
#### **Families of Functions**

9 Which graph represents an exponential equation?



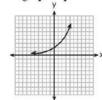
3)

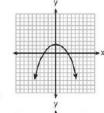






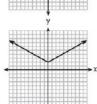
10 Which graph represents an absolute value equation?





1)

1)



# **Answers**

9 ANS: 4