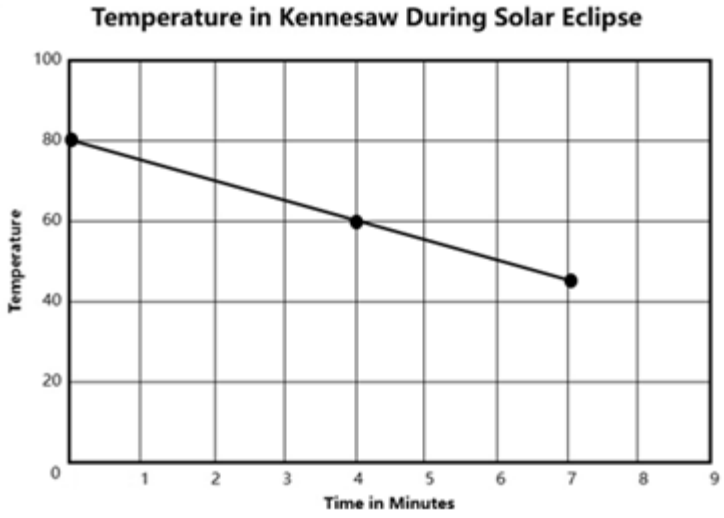
Construct Linear Functions Using Real-Life Phenomena

Name_____ Period:_____ Date:_____

Directions: Use the information given to solve each problem.

1. The graph below represents the temperature in degrees. What unit of measure would be the appropriate rate of change for the function?



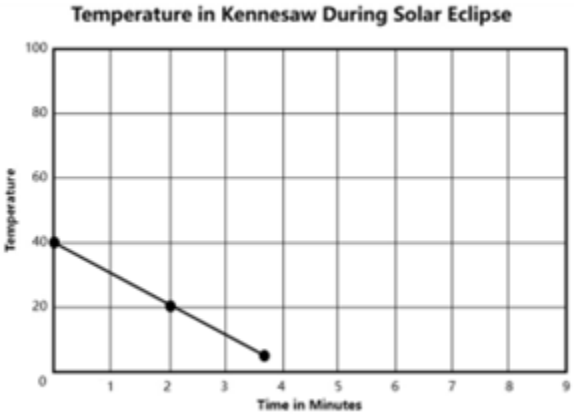
A. $\frac{1}{5}$ degrees per minute

B. 2 degrees per minute

C. -5 degrees per minute

D. $\frac{1}{4}$ degrees per minute

2. Circle all the true statements about the graph below.



A. The y-intercept is 20.

B. The y-intercept is 40.

C. The slope is $-\frac{20}{2}$ degrees per minute.

D. The slope is $-\frac{1}{2}$ degrees per minute.

E. The equation for the function is $y = -10x + 40$.

F. The equation for the function is $y = -\frac{1}{2}x + 40$.

3. The graph below shows the relationship between the amount of money in Natasha's Savings Account and the number weeks it has been open.

Select all of the statements that are true about Natasha's savings account.

A. The equation for the function is $y = x$
B. The equation for the function is $y = 30x$
C. The initial value of Natasha's Savings Account is $0.
D. Natasha's savings account is increasing $0 \leq x \leq 5$.
E. Natasha's savings account is increasing $0 \leq x \leq 150$.
F. At 4 weeks, Natasha will have $90 in her saving account.
G. At 5 weeks, Natasha will have $150 in her saving account.

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Answer Key

Directions: Use the information given to solve each problem.

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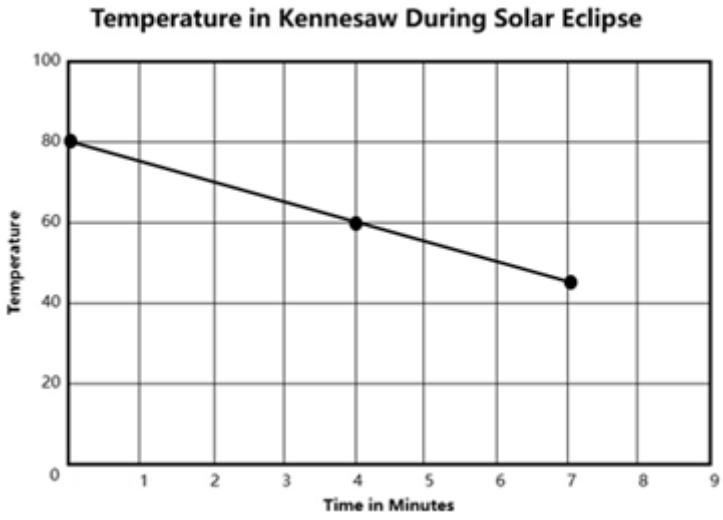

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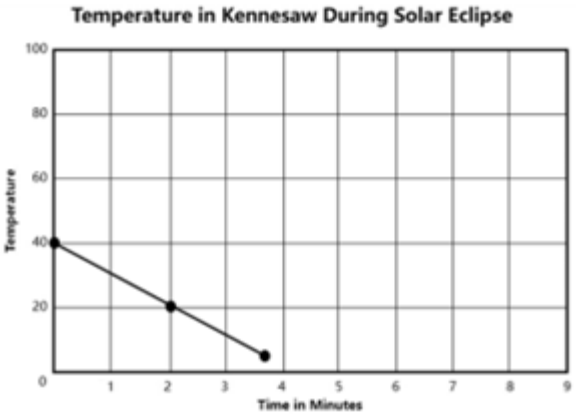

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E. The equation for the function is $y = -10x + 40$.

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B, C, and E

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B, C, D, and G