Nonlinear Functions and Set Theory

Math
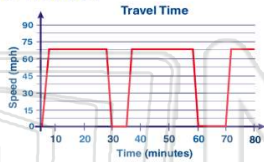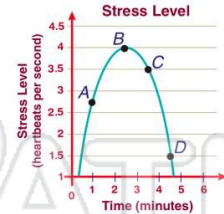
Name_____ Class_____ Date_____

1 According to the graph that represents Linda's drive to her son's house, how many **rest stops** did she take **before arriving** at his house?

A 2
B 3
C 70
D 80

Travel Time

2 Dwayne is taking a test. Based on the graph shown, when is his stress about the test at the **lowest level**?

Stress Level

A point A
B point B
C point C
D point D

3 Quick & Easy home repair charges **$55** plus **$15** per hour that it takes to complete a job. Fast & Sure home repair charges **$75** plus **$5** per hour that it takes to complete a job. According to the graph, in how many hours will the costs for both companies be **equal**?

4 The cellular phone company has a choice of two plans. Plan A is a flat rate of **$59.99** a month for **600** minutes. Plan B is a flexible plan that charges **$29.99** a month plus **$0.10** a minute. Jason talks for **400** minutes. He thinks plan B is the cheaper choice.

5

7

B 12 minutes
C 24 minutes
D 720 minutes

A true
B false

9 Kyle and Kathy are participating in a **5-mile** race. Kyle runs **10 mph** and **stops twice** for **7 minutes**. Kathy runs **8 mph** and **stops twice** for **5 minutes**. Kyle will reach the finish line first.

True or false?

A true
B false

10 A **set** is a collection of objects called elements. If set A = {*x* > 45}, which number is **not** in the set?

A 101
B 97
C 46
D 44

A = {*x* > 45}

Name_____ Class_____ Date_____

1 According to the graph that represents Linda's drive to her son's house, how many **rest stops** did she take **before arriving** at his house?
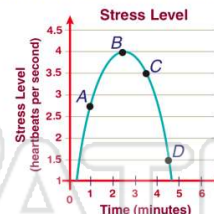
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C 70
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Travel Time

(A)

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Stress Level

(D)

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(C)

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(B)

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(C)

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(A)

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(A)

10 A **set** is a collection of objects called elements. If set $A = \{x > 45\}$, which number is **not** in the set?

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B 97
C 46
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$A = \{x > 45\}$

(D)