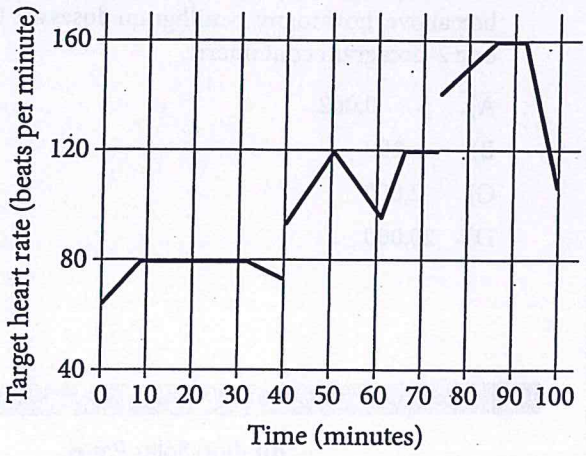
Bellwork Geo Thur. March 5, 2020

1

John runs at different speeds as part of his training program. The graph shows his target heart rate at different times during his workout. On which interval is the target heart rate strictly increasing then strictly decreasing?



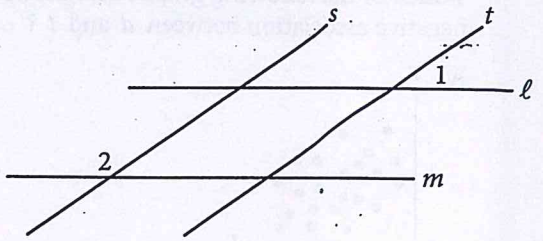
A) Between 0 and 30 minutes
B) Between 40 and 60 minutes
C) Between 50 and 65 minutes
D) Between 70 and 90 minutes

2

If $y = kx$, where k is a constant, and $y = 24$ when $x = 6$, what is the value of y when $x = 5$?

A) 6
B) 15
C) 20
D) 23

3



In the figure above, lines ℓ and m are parallel and lines s and t are parallel. If the measure of $\angle 1$ is 35°, what is the measure of $\angle 2$?

A) 35°
B) 55°
C) 70°
D) 145°

4

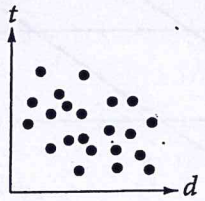
If $16 + 4x$ is 10 more than 14, what is the value of $8x$?

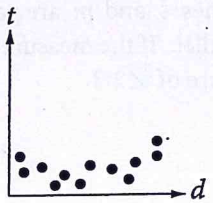
A) 2
B) 6
C) 16
D) 80

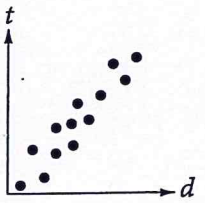
CONTINUE

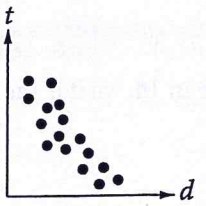
5

Which of the following graphs best shows a strong negative association between d and t ?

A) 

B) 

C) 

D) 

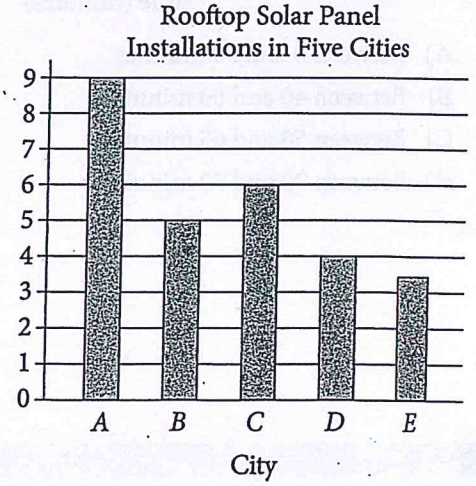
6

1 decagram = 10 grams
1,000 milligrams = 1 gram

A hospital stores one type of medicine in 2-decagram containers. Based on the information given in the box above, how many 1-milligram doses are there in one 2-decagram container?

A) 0.002
B) 200
C) 2,000
D) 20,000

7



The number of rooftops with solar panel installations in 5 cities is shown in the graph above. If the total number of installations is 27,500, what is an appropriate label for the vertical axis of the graph?

A) Number of installations (in tens)
B) Number of installations (in hundreds)
C) Number of installations (in thousands)
D) Number of installations (in tens of thousands)

CONTINUE

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4 ANSWERS 4

1

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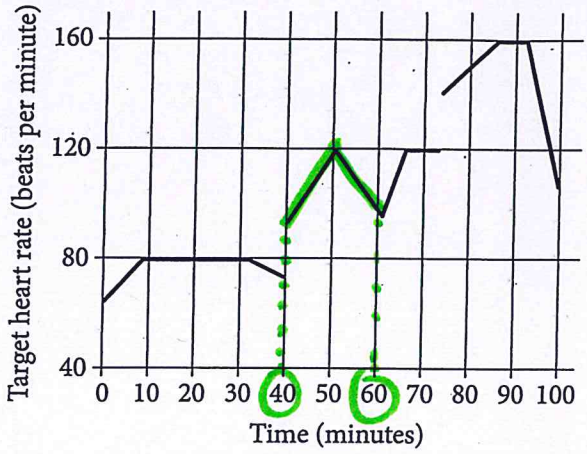

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A) 6
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$y = kx$

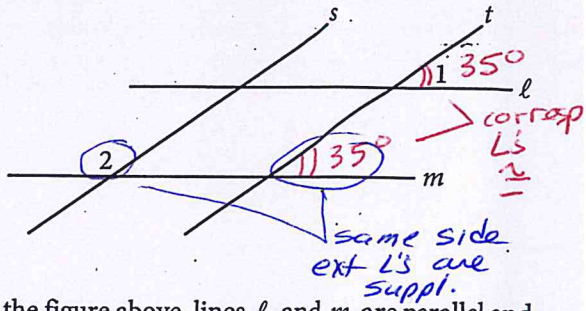
Find k: $\frac{24}{6} = \frac{k \cdot 6}{6}$

$k = 4$

use this k to find y: $y = 4x$

$y = 4 \cdot 5 = 20$

3



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A) 35°
B) 55°
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D) 145°

$\angle 2 + 35° = 180°$
$-35° \quad -35°$

$\angle 2 = 145°$

4

If $16 + 4x$ is 10 more than 14, what is the value of $8x$?

A) 2
B) 6
C) 16
D) 80

$16 + 4x = 14 + 10$

$16 + 4x = 24$
$-16 \quad -16$

$\frac{4x}{4} = \frac{8}{4}$

$x = 2$

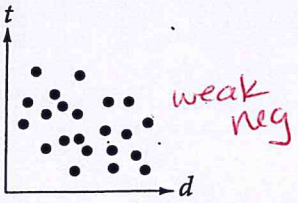
$\therefore 8x = 8(2) = 16$

CONTINUE

5

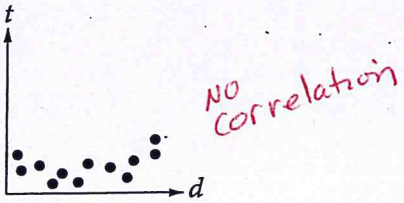
Which of the following graphs best shows a strong negative association between d and t ?

A)



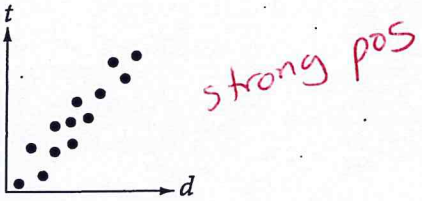
weak neg

B)



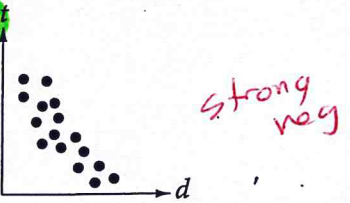
no correlation

C)



strong pos

D)



strong neg

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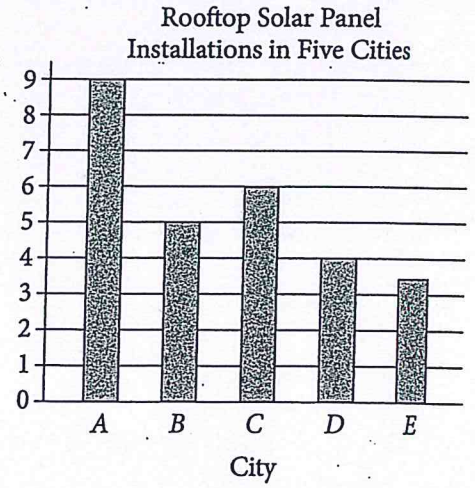
C) 2,000

D) 20,000

$2\ \text{dg} \cdot \frac{10\ \text{g}}{1\ \text{dg}} \cdot \frac{1000\ \text{mg}}{1\ \text{g}}$

$= 20{,}000\ \text{mg}$

7



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