Name Answer Key Class_____ Date_____

8TH GRADE MATHEMATICS TEST PREP

QUESTION #29

Which set of ordered pairs models a function?

A. {(2, 9), (7, 5), (3, 14), (2, 6)} Not a function.

B. {(5, 10), (5, 15), (5, 20), (5, 25)} Not a function

C. $\{(-\frac{1}{2}, -\frac{1}{3}), (\frac{1}{2}, -\frac{1}{4}), (-\frac{1}{2}, -\frac{1}{5}), (\frac{1}{2}, -\frac{1}{6})\}$ Not a function.

D. {(−10, 20), (−20, 30), (−30, 40), (−40, 10)} → does not repeat an x-value, Is a function

QUESTION #30

Cecil has a paper cup in the shape of a cone, as shown below.

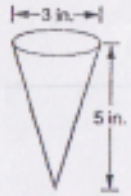
$V = \frac{1}{3}\pi r^2 h$

$V = \frac{1}{3}\pi(1.5)^2(5)$

$V = \frac{1}{3}\pi(2.25)(5)$

$V = 3\frac{3}{4}\pi$

Cecil's Paper Cup



What is the volume of Cecil's paper cup?

A. $2\frac{1}{2}\pi$ cubic in.

B. $3\frac{3}{4}\pi$ cubic in.

C. 15π cubic in.

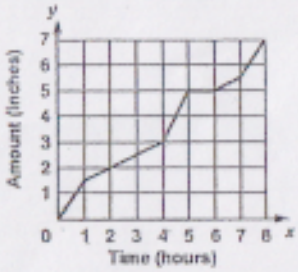
D. 60π cubic in.

QUESTION #31

A weather station recorded the amount of rain that fell during an 8-hour time frame using a rain gauge. The findings are recorded in the graph below.

Between which hours was the rate at which the rain fell greater than the rate at which the rain fell between hours 0 and 1? → m = 1.5

Amount of Rain in Rain Gauge



A. between hours 1 and 4 $1\frac{1}{2}/3 = \boxed{1/2}$

B. between hours 4 and 5 $\boxed{m=2}$

C. between hours 5 and 6 $\boxed{m=0}$

D. between hours 7 and 8 $\boxed{m=1.5}$

1.5 < 2

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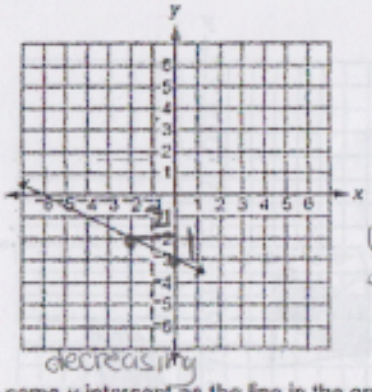
8TH GRADE MATHEMATICS TEST PREP

QUESTION #32

Use the graph below to answer the question.



$y = \frac{-1}{2}x - 3$

Which equation has the same y-intercept as the line in the graph, and a slope that is the opposite of the slope in the graph?

(positive

−3

A. $y = \frac{1}{2}x - 3$

B. $y = \frac{1}{2}x + 3$

C. $y = -2x - 3$

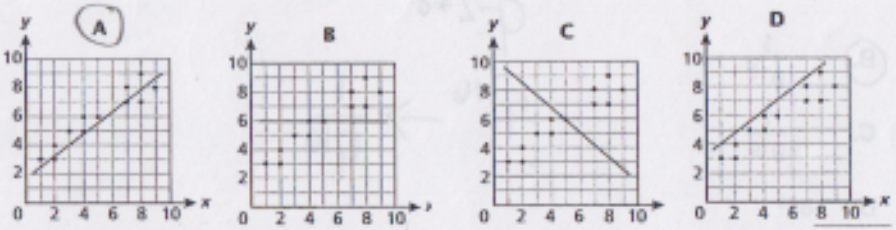
D. $y = 2x - 3$

$y = \frac{1}{2}x - 3$

opposite same

QUESTION #33

Which line represents the best fit for the scatter plot data?



general representation of data