$\qquad$ Date $\qquad$

## Graphing

(1) Jake measures the temperature every day at 2 P.M. The temperature on Monday was $65^{\circ} \mathrm{F}$. On Thursday the temperature was $69.5^{\circ} \mathrm{F}$ and on Sunday it was $74^{\circ} \mathrm{F}$. Jake said the temperature increased by a constant amount each day. Assuming that Jake was correct, fill in the chart, and then graph the temperatures for the week.

TEMPERATURE AT 2 P.M.


| Monday | $65^{\circ} \mathrm{F}$ |
| :--- | :---: |
| Tuesday |  |
| Wednesday |  |
| Thursday | $69.5^{\circ} \mathrm{F}$ |
| Friday |  |
| Saturday |  |
| Sunday | $74^{\circ} \mathrm{F}$ |

Day

## Test Prep

(2) Kaylee picked a marble from a bag. After noting the color she put it back in the bag and drew again. After ten draws she made this table.

| Color | Red | White | Green | Black |
| :--- | :---: | :---: | :---: | :---: |
| Number of draws | 3 | 1 | 2 | 4 |

Based on these results, what is the experimental probability of drawing a black marble from the bag?
A. $\frac{1}{2}$
B. $\frac{4}{5}$
C. $\frac{2}{5}$
D. $\frac{3}{10}$

## Graphing Capacity Conversions

Fill in each conversion table and graph the points.

| Quarts | Gallons |
| :---: | :---: |
|  | 1 |
|  | 2 |
|  | 4 |
| 12 |  |



PINTS-QUARTS CONVERSION


## Test Prep

(3) The manager of the hardware store wants to string lights around the window. How many feet of lights will he need to outline the 4 sides of the window? Explain how you found the answer.

$\qquad$
$\qquad$
$\qquad$

> Name
$\qquad$

## Changing the Scale of Graphs

Complete each table and make a graph to show the conversion. Choose an appropriate scale and number the axes accordingly.

1

| Kilograms | Grams |
| :---: | :---: |
| 1 | 1,000 |
| 2 |  |
|  | 3,000 |
| 6 |  |
|  | 7,000 |
| 8 |  |

2

| Pounds | Ounces |
| :---: | :---: |
| 1 |  |
| 2 |  |
| $\frac{1}{2}$ |  |
|  | 24 |
|  | 48 |



Kilograms

## POUNDS-OUNCES CONVERSION



Pounds

## Test Prep

(3) Find two equivalent fractions for $\frac{3}{6}$ and explain how you did it.

## Graphing Change Over Time

This graph shows how far Tom went on his bike ride and how long it took him.
(1) Complete the table.

| Time <br> (in minutes) | Distance <br> (in miles) |
| :---: | :---: |
| 10 |  |
| 20 | 10 |
|  |  |
| 60 | 20 |
| 100 | 35 |


(2) How fast did Tom ride? $\qquad$ miles per hour
(3) It took Francesca half an hour to ride 5 miles.

Did she ride faster or slower than Tom?
(4) How long will it take Francesca to go 15 miles?

## Test Prep

(5) A photocopy machine takes 20 minutes to print 180 pages.

This represents $\frac{2}{5}$ of a large job. Explain how you would find the length of time needed to print the entire job.

## Graphing the Story of a Trip

The Callahan family went on a trip in their car. They changed speed at 4 points along the way, but kept a constant speed between one point and the next.
(1) Complete the table and graph of the Callahans' trip.

| Point | Time <br> on clock | Distance <br> from Start |
| :---: | :---: | :---: |
| $A$ | $1: 00$ | 0 |
| $B$ | $1: 45$ |  |
| $C$ |  |  |
| $D$ | $3: 15$ | 140 |
| $E$ | $4: 00$ | 160 |

THE CALLAHANS' TRIP

(2) How long did it take them to drive from Point $C$ to Point $E$ ?
(3) Were they driving faster between Point $B$ and Point $C$, or between Point $C$ and Point $D$ ? Explain how you know.

## Test Prep

(4) A restaurant has tables that seat 4 people. When the restaurant is full, it holds 152 people. How many people are in the restaurant if half of the tables are full and half have two people at them? Explain how you found your answer.
$\qquad$

## Graphing Temperature Conversions

HOURLY TEMPERATURE

(1) Use this table to make a graph of how the temperature changed over the day.

| Time | $12: 00$ | $1: 00$ | $3: 00$ | $5: 00$ | $8: 00$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Temperature | $4^{\circ} \mathrm{C}$ | $3^{\circ} \mathrm{C}$ | $1^{\circ} \mathrm{C}$ | $-1^{\circ} \mathrm{C}$ | $-4^{\circ} \mathrm{C}$ |

2) If the temperature keeps following this pattern, what will the temperature be at 9:00 P.M.?

## Test Prep

(3) Matt turned on the oven. Ten minutes later, the temperature in the oven had risen by $113^{\circ} \mathrm{F}$ and was now $181^{\circ}$ F. What was the temperature in the oven before Matt turned it on?
A. $72^{\circ} \mathrm{F}$
B. $78^{\circ} \mathrm{F}$
C. $294^{\circ} \mathrm{F}$
D. $68^{\circ} \mathrm{F}$
(4) Which could be a rule for the $N$ th number in this pattern.

$$
-3,-1,1,3,5
$$

A. $N-4$
B. $N-3$
C. $2 N-5$
D. $3 N-6$

