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$\qquad$

## Graphing

Profits at the school store are decreasing. The class President is concerned that, at this rate, the store will have to close.
(1) The graph shows the profits for three months.

Assume that this pattern of decreasing profits continues. Plot points for the profits in
December and January.

(2) If this constant rate of decline continues, when will the store have a profit of $\$ 0$ ?
(3) When should the store close if it needs a profit of at least $\$ 100$ to stay open? Explain.

## Graphing Capacity Conversions

Jennifer made these graphs showing how to convert different capacity units, but she forgot to label them.


Complete these conversions.

| Pints | Cups |
| :---: | :---: |
| 1 |  |


| Gallons | Quarts |
| :---: | :---: |
| 1 |  |


| Quarts | Cups |
| :---: | :---: |
| 1 |  |


| Gallons | Cups |
| :---: | :---: |
| 1 |  |


| Gallons | Pints |
| :---: | :---: |
| 1 |  |

2. Which pairs of units could go with each graph? Fill in all the pairs that are possible.


Name $\qquad$ Date $\qquad$

## Changing the Scale of Graphs

(1) If you know the length of a side of a square, you can calculate its area. Complete this table of some possible side lengths and areas.

| Side Length <br> (cm) | Area <br> (sq cm) |
| :---: | :---: |
| 1 |  |
| 2 |  |
|  | 16 |
| 5 |  |
| 6 |  |
|  | 9 |

(2) Number the axes and graph these points.
(3) Explain how you chose the scale to number the axes.
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$


## Graphing Change Over Time

Paul and Andrea rode their bicycles starting from the park entrance at 12:00. These graphs show how far they went.


ANDREA'S BIKE TRIP

(1) Who rode faster? Explain how you know.
$\qquad$
$\qquad$
$\qquad$
2. How far ahead was that person at the end of the hour?
(3) If they kept going at the same speeds shown on the graphs, what time was it when one rider was 6 miles ahead of the other? Explain.

## Graphing the Story of a Candle



Time

Graph B


Graph C


Graph D


## A candle burned for a while and then was blown out.

 Which of the graphs above could show . . .(1) How the height of the candle changed over time.
2. How the amount of light the candle gives off changed over time.
(3) The amount of melted wax at the bottom of the candle.
4. Explain why you chose one of your answers.

## Graphing Temperature Conversions

| ${ }^{\circ} \mathrm{C}$ | ${ }^{\circ} \mathrm{F}$ |
| :---: | :---: |
| -20 | -4 |
|  |  |
|  |  |
|  |  |
|  |  |
| -50 | -58 |

(1) When is the temperature in Fahrenheit the same as the temperature in Celsius?
$\qquad$ ${ }^{\circ} \mathrm{C}=$ $\qquad$ ${ }^{\circ} \mathrm{F}$
2. Do you think there are other temperature that are the same in Celsius and Fahrenheit? Explain why or why not.
$\qquad$

CELSIUS-FAHRENHEIT CONVERSION Degrees Celsius
$-60-55-50-45-40-35-30-25-20-15-10 \quad-5$

|  |  |  |  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |  |  |  |  |

