

Name _____

1-5B Lesson Master

Questions on SPUR Objectives
See pages 60–63 for objectives.

REPRESENTATIONS Objectives K, L, M

In 1 and 2, use the table to answer the questions.

1. Use a graphing calculator to complete the table of values for $y = x - (5.2 - x)$.

Use your graphing calculator to find the value of $x - (5.2 - x)$ when $x = 8$.

| x | $x - (5.2 - x)$ |
|-----|-----------------|
| -2 | -9.2 |
| -1 | |
| 0 | |
| 1 | |
| 2 | |

2. Graph $y = x^3 - 3x^2 - 4x + 12$ on your calculator using the standard window.

- a. Sketch the graph in the box.



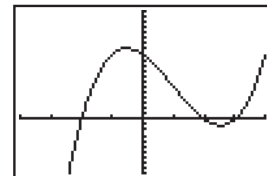
- b. Adjust the window so that it looks like the graph below. Find the new min and max values.

Xmin: _____

Xmax: _____

Ymin: _____

Ymax: _____



3. Use a graphing calculator to determine whether the expressions $(x - 3)^2$ and $x^2 - 9$ seem to be equivalent. Explain your reasoning.

4. Graph $y = 2x^2(x - 1)(x + 3)$ on your calculator using the standard window.

- a. Explain why this is not an appropriate window.

- b. Find an appropriate window and describe it with two inequalities.

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1-5B

page 2

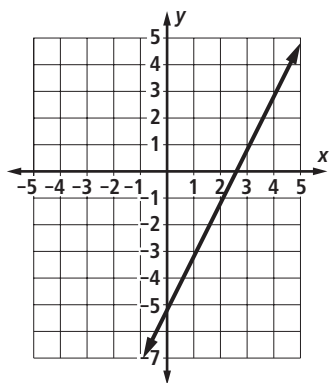
REPRESENTATIONS Objectives K, L, M

5. Use a graphing calculator to complete the table of values for $y = \frac{1}{4}(x^2 + 2)$.

| x | $\frac{1}{4}(x^2 + 2)$ |
|-----|------------------------|
| -2 | |
| -1 | |
| 0 | |
| 1 | |
| 2 | |

Write two inequalities to describe an appropriate graphing window for the graph of $y = \frac{1}{4}(x^2 + 2)$.

6. Write the two inequalities that describe the window for the graph below.



7. Graph $y = -x^2 - 3$ on your calculator using the standard window.

a. Explain why this is not an appropriate window.

b. Find an appropriate window and describe it with two inequalities.
