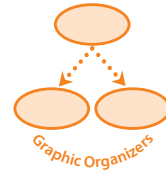


Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Problem-Based Task: When Is the Next Dose Due?

The amount of a certain medication remaining in the bloodstream  $t$  hours after taking the medicine is modeled by the equation  $M(t) = -x^3 + 5x^2 + 3x + 18$ . Package directions recommend taking a second dose 4–6 hours after the initial dose. Use synthetic substitution to show that these directions are accurate.



SMP	
1	2 ✓
3	4 ✓
5	6
7	8 ✓

