



Name \_\_\_\_\_ Period \_\_\_\_\_

### Ch. 7 Performance Task – Indian Mythology

According to Indian mythology, Lord Brahma is the creator of the universe, Lord Vishnu is the sustainer, and Lord Shiva is the destroyer.

After Lord Brahma created the universe, he wanted to make a bridge from the Heavens to Earth on which the gods could descend. By himself, Lord Brahma could build the bridge in 10 days, but he decided to accept Lord Vishnu's help to expedite the task. Lord Vishnu by himself was capable of building the same bridge in 15 days.

#### Part I

1.
  - a. What fraction of the bridge could Lord Brahma build by himself in one day? \_\_\_\_\_
  - b. In three days? \_\_\_\_\_
  - c. In 'x' days? \_\_\_\_\_
  - d. What fraction of the bridge could Lord Vishnu build by himself in 'x' days? \_\_\_\_\_
  
2. How long would it take for Lord Brahma and Lord Vishnu to build the bridge if they worked together? Write an equation and solve it.
  
  
  
  
  
  
  
  
  
  
3. Lord Brahma was busy creating additional universes, so he asked Lord Vishnu to start building the bridge. Lord Vishnu worked by himself at first, and then Lord Brahma joined him after 5 days.
  - a. What fraction of the bridge had Lord Vishnu built in 5 days? Simplify. \_\_\_\_\_
  - b. If Lord Brahma joined Lord Vishnu after 5 days and they worked together for 3 more days, what fraction of the bridge will they have built? Simplify.
  - c. Once Lord Brahma joined Lord Vishnu, how much **additional** time did they have to work together to **complete** the bridge? Write an equation and solve it.

## Part II

Lord Vishnu started building the bridge, and Lord Brahma joined 5 days later. They worked together for 3 days and then Lord Shiva, the destroyer, showed up. Lord Shiva started destroying the partially-built bridge. Shiva was very strong and could destroy the fully built bridge in 8 days. Lord Brahma and Lord Vishnu decided to ignore Lord Shiva and kept on building the bridge while Shiva was busy breaking it down.

1. Once Lord Shiva started destroying the bridge, how much longer did it take for Lord Brahma and Lord Vishnu to complete the bridge? Write an equation and solve it.
  
  
  
  
  
  
  
  
  
  
2. If Lord Shiva was stronger and could destroy the bridge in 6 days, how long would it take for Lord Brahma and Lord Vishnu to complete the bridge? Write an equation and solve it. **Explain your answer.**

## Part III – 1 pt. extra credit (must be completely correct with appropriate work shown to support answer)

Lord Shiva had special powers that he could invoke by opening his third eye. If he did that, Lord Shiva could destroy the fully-built bridge in 4 days. Using the scenario from Part II (Lord Vishnu worked alone for 5 days, then Lord Vishnu and Lord Brahma worked together for 3 days, then Lord Shiva started destroying the bridge), **how long would it take Lord Shiva to completely destroy the bridge**, while Lord Brahma and Lord Vishnu continued to build the bridge? Write an equation and solve it.