

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

### Using Prime Factorization to find the L.C.M.

Read the questions below carefully and answer to the best of your abilities.

1. Find the L.C.M. of 15 and 20 using prime factorization.

|  | 15 | 20 |
|--|----|----|
|  |    |    |
|  |    |    |
|  |    |    |
|  |    |    |

L.C.M. of 15 and 20 = \_\_\_\_ × \_\_\_\_ × \_\_\_\_ × \_\_\_\_ = \_\_\_\_

2. Find the L.C.M. of 20 and 25 using prime factorization.

|  | 20 | 25 |
|--|----|----|
|  |    |    |
|  |    |    |
|  |    |    |
|  |    |    |

L.C.M. of 20 and 25 = \_\_\_\_ × \_\_\_\_ × \_\_\_\_ × \_\_\_\_ = \_\_\_\_

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

3. Find the L.C.M. of 6, 20 and 25 using prime factorization.

|  | 6 | 20 | 25 |
|--|---|----|----|
|  |   |    |    |
|  |   |    |    |
|  |   |    |    |
|  |   |    |    |
|  |   |    |    |

L.C.M. of 6, 20 and 25 =  $\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

4. Find the L.C.M. of 40, 50 and 60 using prime factorization.

|  | 40 | 50 | 60 |
|--|----|----|----|
|  |    |    |    |
|  |    |    |    |
|  |    |    |    |
|  |    |    |    |
|  |    |    |    |
|  |    |    |    |

L.C.M. of 40, 50 and 60 =  $\underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$

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

5. Find the L.C.M. of 4, 8, 12 and 16 using prime factorization.

|  | 4 | 8 | 12 | 16 |
|--|---|---|----|----|
|  |   |   |    |    |
|  |   |   |    |    |
|  |   |   |    |    |
|  |   |   |    |    |
|  |   |   |    |    |

L.C.M. of 4, 8, 12 and 16 = \_\_\_\_ × \_\_\_\_ × \_\_\_\_ × \_\_\_\_ × \_\_\_\_ = \_\_\_\_