Name: $\qquad$ \#: $\qquad$ Date:

## Extra Practice: Unit 1 - Challenge Work

## Multiplicative Comparison

1. A play area is 9 feet wide and 45 feet long. How many times longer is the length of the play area than the width?

Make a drawing to represent the problem:

Write an equation to represent the problem:

Answer: The length is $\qquad$ times longer than the width.
2. Huda is practicing for a race. In the first week, she ran 8 miles. In the second week, she ran three times as far as the first week. In the third week, she ran two times as far as the first week.

## How many miles did Huda run the second week?

Make a drawing to represent the problem:

Write an equation to represent the problem:

## How many miles did Huda run the third week?

Make a drawing to represent the problem:

Write an equation to represent the problem:

## Factors and Multiples

3. Factors and multiples of 150.

Write down the dimensions for all the possible arrays for 150. example: $1 \times 150$

List all the factors of 150.

Is 150 prime or composite? Why?

List all the factors of 25.

Are there any factors of 25 that are not factors of 150 ? Why or why not?
4. Which of the following are multiples of 7 ?

- 42
- 75
- 119
- 125
- 84

Use the chart below if you need to:

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |
| 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 |
| 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 |
| 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 |
| 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 |
| 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 |
| 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 |
| 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
| 101 | 102 | 103 | 104 | 105 | 106 | 107 | 108 | 109 | 110 |
| 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 |
| 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 |

## Prime \& Composite

5. Are all even numbers prime? Why or why not? Use examples to explain.
6. Are all even numbers composite? Why or why not? Use examples to explain.
7. Are all odd numbers prime? Why or why not? Use examples to explain.
8. Are all odd numbers composite? Why or why not? Use examples to explain.
