

**NF.6 Lesson 6 - Problem Set**

Name \_\_\_\_\_

Date \_\_\_\_\_

Steps:

1. Write an equation to represent the problem.
  2. Decompose the mixed numbers.
  3. Find the partial products using the window method.
  4. Combine the pieces, making like units when necessary.
  5. Simplify if possible by thinking about multiples
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1.  $\frac{1}{2} \times 4 \frac{2}{3} =$  \_\_\_\_\_

2.  $\frac{2}{3} \times 12 \frac{3}{4} =$  \_\_\_\_\_

3.  $9 \frac{1}{4} \times \frac{3}{4} =$  \_\_\_\_\_

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4.  $8 \frac{2}{3} \times 10 \frac{1}{4} =$  \_\_\_\_\_

5.  $12 \frac{1}{2} \times 5 \frac{2}{3} =$  \_\_\_\_\_

6.  $4 \frac{1}{2} \times 7 \frac{1}{3} =$  \_\_\_\_\_

7. Each lap around the track is  $2 \frac{2}{3}$  miles. Taniya completed  $6 \frac{1}{2}$  laps. How many miles did Taniya run?

**Why Is this Multiplication?****Solve**

8. Jahriah's mom bought a new rug for the dining room. The rug is  $5 \frac{2}{3}$  feet wide and  $7 \frac{1}{4}$  feet long. What is the area of the new rug?

**Why Is this Multiplication?****Solve**

9. If the area of Reggie's bedroom is  $46 \frac{3}{4}$  square feet, which of the following could be the measurements of his room?

- a.  $10 \frac{1}{4}$  feet wide and  $3 \frac{1}{4}$  of a foot long
- b.  $8 \frac{1}{2}$  feet wide and  $5 \frac{1}{2}$  feet long
- c.  $6 \frac{1}{2}$  feet wide and  $6 \frac{1}{2}$  feet long
- d.  $6 \frac{1}{2}$  feet wide and  $5 \frac{1}{2}$  feet long