Name_____ **Date**_____

Grade 5 NF.6: Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.

1. It takes 2 ½ cans of paint to paint one part of the fence. How many cans would it take to paint all 9 parts of the fence?
    a) 18
    b) 14
    c) $22\ ^{1}/_{9}$
    d) $22\ ^{1}/_{2}$

2. Brian has $1\ ^{3}/_{4}$ pounds of vegetables. If $^{1}/_{5}$ of them are carrots, how many pounds of carrots does he have?
    a) $^{8}/_{9}$
    b) $^{3}/_{20}$
    c) $^{7}/_{20}$
    d) $^{4}/_{9}$

3. $^{3}/_{5}$ of Bob's magazines are sports related. $^{1}/_{2}$ of his sports magazines are all about soccer. What fraction of Bob's magazines are soccer?
    a) $^{4}/_{7}$
    b) $^{3}/_{10}$
    c) $^{3}/_{7}$
    d) $^{2}/_{3}$

4. $^{4}/_{9}$ of the students in a classroom are girls. $^{2}/_{3}$ of the girls have brown hair. What fraction of the students are brown haired girls?
    a) $^{8}/_{27}$
    b) $^{6}/_{27}$

c) $^{6}/_{12}$
d) $^{2}/_{6}$

5. Michael purchased $3\ ^{3}/_{5}$ pounds of trail mix. If $^{1}/_{4}$ of the trail mix had pistachios in it, how many pounds of pistachio trail mix did he buy?

a) $^{9}/_{10}$
b) $^{3}/_{9}$
c) $^{9}/_{20}$
d) $^{18}/_{21}$

Show your work in visual fraction models or equations for problems 6, 7, & 8.

6. A piece of land is ¾ kilometer wide. Its length is 5 ⅓ times as long as it is wide. How long is the piece of land?

7. 2½ crates of apples are delivered to the greengrocers on Monday morning. 2/5 of the apples in each crate are green apples. How many crates would it take to deliver only the green apples?

8. Last week, Jake spent 6¼ hours reading. Lia spent 3/5 as many hours as Jake reading. How many hours did Lia spend reading?