## Show all work on a separate sheet of paper.

For full credit all answers dealing with fractions on this test should be written in simplest form unless otherwise instructed.

## Fraction Review

| 1. | Place in order from least to greatest: $\frac{3}{4}, \frac{1}{3}, \frac{2}{5}, \frac{4}{7}$ |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 2. | Place in order from greatest to least: $\frac{5}{9}, \frac{6}{7}, \frac{4}{5}, \frac{8}{10}$ |  |  |  |  |
| 3. | Simplify: $\frac{6}{9}, \frac{4}{12}, \frac{3}{15}$ |  |  |  |  |
| 4. | Convert to improper fractions: $4 \frac{1}{3}, 5 \frac{1}{2}$ |  |  |  |  |
| 5. | Convert to mixed numbers: $\frac{18}{4}, \frac{36}{5}$ |  |  |  |  |

Adding and Subtracting Fractions

| 6. | $3 \frac{1}{2}+2 \frac{1}{4}$ |  | 7. | $4 \frac{2}{3}+3 \frac{3}{4}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 8. | $8 \frac{3}{4}-5 \frac{1}{2}$ |  | 9. | $7-3 \frac{2}{3}$ |  |

## Fraction Multiplication and Division



| 14. | You can solve a division problem by repeated | The problem $\frac{1}{2} \div \frac{2}{3}$ means... |
| :--- | :--- | :--- |
| A. How many groups of $\frac{1}{2}$ are there in $\frac{2}{3} ?$ |  |  |
| 15. | B. How many groups of $\frac{2}{3}$ are there in $\frac{1}{2} ?$ |  |
| C. How much is $\frac{2}{3}$ of a group of $\frac{1}{2} ?$ |  |  |
| D. How much is $\frac{1}{2}$ of a group of $\frac{2}{3} ?$ |  |  |

Use the rectangles below to demonstrate how to solve the following problems. You may cut up each rectangle into as many rows and columns as you need. Then record your answer in the space provided.

| 16. | $\frac{3}{4} \bullet \frac{1}{3}$ |  | 17. | $\frac{2}{3} \bullet \frac{1}{2}$ |
| :--- | :--- | :--- | :--- | :--- |



Solve. You may leave your answer as an improper fraction.

| 18. | $\frac{1}{3} \bullet \frac{1}{8}$ |  | 19. | $\frac{3}{4} \bullet \frac{4}{5}$ |  |
| :---: | :---: | :---: | :---: | :---: | :--- |
| 20. | $\frac{5}{6} \bullet \frac{1}{4}$ |  | 21. | $\frac{4}{5} \bullet 6$ |  |
| 22. | $5 \frac{1}{2} \bullet 3 \frac{4}{5}$ |  | 23. | $4 \frac{3}{4} \bullet 7 \frac{1}{6}$ |  |

Use the circles below to demonstrate how to solve the following problems. You may cut up each circle into as many pieces as you need. Then record your answer in the space provided.

| 24. | $3 \div \frac{1}{2}$ |  | 25. | $6 \div \frac{2}{3}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |



Solve. You may leave your answer as an improper fraction.

| 26. | $\frac{5}{6} \div \frac{1}{6}$ |  | 27. | $\frac{9}{10} \div \frac{3}{10}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 28. | $\frac{7}{8} \div \frac{1}{4}$ |  | 29. | $3 \frac{1}{2} \div \frac{3}{4}$ |  |
| 30. | $8 \frac{1}{3} \div \frac{5}{6}$ |  | 31. | $4 \frac{1}{3} \div 2 \frac{1}{4}$ |  |

Mr. Mangham discovers the following items in his refrigerator one Saturday afternoon:

| ITEM | AMOUNT | ITEM | AMOUNT |
| :---: | :---: | :---: | :---: |
| Pumpkin Pie | $\frac{5}{6}$ of a whole | Ketchup | $1 \frac{2}{3}$ jars |
| Apple | $2 \frac{1}{4}$ | Little Debbies | 12 |
| PB\&J sandwich | 9 whole sandwiches | Orange Juice | $\frac{4}{5}$ of a liter |
| Macaroni \& Cheese | $7 \frac{7}{8}$ pounds | Mint Chocolate Chip <br> Ice Cream | $5 \frac{1}{2}$ containers |


| 32. | If he eats $\frac{1}{2}$ of the apples, how many apples did he eat? |  |
| :--- | :--- | :--- |
| 33. | If he uses $\frac{1}{5}$ of the ketchup, how much ketchup did he use? |  |
| 34. | If he eats $\frac{3}{8}$ of the ice cream, how much did he eat? |  |
| 35. | Mr. Mangham's friends each want $\frac{3}{4}$ of a PB\&J sandwich. How many friends <br> can he feed? | Mr. Mangham pours the orange juice into containers each holding $\frac{1}{10}$ of a liter. <br> How many containers does he fill up? |



