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

1-10. Place the following fractions into the correct bucket.

| $\frac{1}{9}$ | $\frac{12}{5}$ | $\frac{6}{7}$ | $\frac{10}{10}$ | $\frac{5}{8}$ | $\frac{11}{6}$ | $\frac{6}{12}$ | $\frac{3}{11}$ | $\frac{20}{40}$ | $\frac{13}{13}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |



Less than one-half


One-half


Greater than onehalf and less than one whole


One whole


Greater than one whole

Write the fraction in simplest form.

| 11. | $\frac{12}{14}$ | 12. | $\frac{8}{32}$ |  | 13. | $\frac{24}{30}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 14. | Which fraction is not equivalent to $\frac{6}{9} ?$ |
| :--- | :--- | :--- | :--- | :--- |
|  | A. $\frac{2}{3}$ B. $\frac{12}{18}$ C. $\frac{66}{99}$ D. $\frac{16}{19}$ |

15. 

Set A

$$
\begin{array}{llll}
\frac{1}{8} & \frac{5}{12} & \frac{3}{5} & \frac{4}{7}
\end{array}
$$

Which statement best describes a common characteristic of Set A but NOT of Set B?
A. The fractions are all greater than one whole.
B. The fractions are all less than one whole.
C. The fractions are all in simplest form.
D. The fractions are all equivalent.

| 16. | You are buying donuts for breakfast. You buy 4 blueberry, 12 <br> chocolate, 2 glazed, and 3 sprinkle donuts. Find the fraction of the <br> donuts that are chocolate. Write your answer in simplest form. |  |
| :---: | :--- | :--- |
|  | Mrs. Hawley plants a variety of flowers in her flower bed. She plants $\frac{1}{4}$ | Most |
| of the flower bed with lilies, $\frac{7}{16}$ with roses, $\frac{1}{8}$ with pansies, and $\frac{3}{16}$ |  |  |
| with daises. Which flower takes up the most room in the flower bed? |  |  |
| Which flower takes up the least room in the flower bed? |  |  |$~$| Least |  |
| :--- | :--- |
|  | You have a twelve pack of Dr. Pepper. You give four cans away to your <br> favorite math teacher and two can away to your favorite LA teacher. <br> What fraction of the cans do you have left? |
| A. $\frac{4}{12}$ B. $\frac{2}{12}$ C. $\frac{1}{2}$ D. $\frac{12}{6}$ |  |

Order the fractions from greatest to least.

| 19. | $\frac{1}{4}, \frac{2}{10}, \frac{2}{7}$ |  |  |  | 20. | $\frac{6}{5}, \frac{6}{7}, \frac{9}{10}$ |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |


| 20. | The cafeteria serves octopus every 6 days and the cafeteria serves <br> lima beans every 8 days. How many times over a 100 day period <br> will you be able to enjoy octopus with lima beans? |  |
| :--- | :--- | :--- |
| A. $2 \quad$ B. $4 \quad$ C. 6 | D. 8 |  |$\quad$| Katy Perry got a hit 2 out of 7 times in a baseball game. In the |
| :--- |
| same game Rihanna got a hit in 1 out of 5 at-bats and Selena |
| Gomez got a hit 2 out of 6 at-bats. Who had the best (highest) |
| batting average? |$\quad$| A. Katy and Selena tied since they each got 2 hits. |
| :--- |
| B. Selena because $\frac{2}{6}$ is the largest fraction. |
| C. Rihanna since she only had 5 at-bats. |
| D. Katy because $\frac{2}{7}$ has the largest denominator. |

Write each improper fraction as a mixed number in simplest form.

| 23. | $\frac{9}{5}$ |  | 24. | $\frac{22}{8}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |

Write each mixed number as an improper fraction.

| 25. | $6 \frac{2}{3}$ |  | 26. | $9 \frac{4}{5}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |

Create a factor tree and Venn diagram to solve the following questions.

| 27.-33. 30, 36 |  | $34.40 .12,54$ |  |
| :---: | :---: | :---: | :---: |
| Factor Tree - 30 | Factor Tree - 36 | Factor Tree - 12 | Factor Tree - 54 |
| Venn Diagram |  | Venn Diagram |  |
| Prime factorization of 30 | Prime factorization of 36 | Prime factorization of 12 | Prime factorization of 54 |
| GCF of 30 and 36: |  | GCF of 12 and 54: |  |
| LCM of 30 and 36: |  | LCM of 12 and 54: |  |

