## Test - 2nd Six Weeks Study Guide

1. The grid below represents the 300 people who came to PTA Parent Night at school. What does the one unit square that is shaded represent?

A. 3 people, because 3 multiplied by 100 represents the total 300 people that came to the PTA Parent Night
B. 1 person, because 1 multiplied by 100 represents $100 \%$ of the grid
C. 0.5 , because 0.5 multiplied by 300 is 150 people which represents exactly one-half of the attendance at PTA Parent Night
D. 0.3 repeating, because 1 out of 300 people is one-third of the $100 \%$ grid
2. Jacob answered 8 out of every 9 questions correctly on his test. If there were 72 questions on his test, how many did he answer correctly?
F. $\quad 72$
G. 64
H. 56
J. 81
3. Kelsey asked her fellow 6th grade students what their favorite fruit was. She found that 6 out of every 9 students like strawberries best. If there are 270 students in the 6th grade, how many of them like strawberries best?
A. 30
B. 45
C. 180
D. 405
4. Rafael pays $\$ 550$ in rent each month. Which table best represents the relationship between $m$, the number of months, and $r$, the amount he pays in rent for that length of time?
F.

| $m$ | $r$ <br> (dollars) |
| :---: | :---: |
| 3 | 1,650 |
| 6 | 3,300 |
| 9 | 4,950 |

H.

| $m$ | $r$ <br> (dollars) |
| :---: | :---: |
| 550 | 1 |
| 1,100 | 2 |
| 1,650 | 3 |

G.

| $m$ | $r$ <br> (dollars) |
| :---: | :---: |
| 1 | 550 |
| 2 | 1,050 |
| 3 | 1,550 |

J.

| $m$ | $r$ <br> (dollars) |
| :---: | :---: |
| 2 | 1,000 |
| 4 | 2,000 |
| 6 | 3,000 |

5. As part of a survey, 50 students were asked about their favorite lunch item. The results are shown in the table below.

Lunch Preferences

| Favorite <br> Item | Number of <br> Students |
| :--- | :---: |
| Pizza | 10 |
| Tacos | 5 |
| Hot dogs | 15 |
| Hamburgers | 20 |

The cafeteria manager knows that about 300 students buy lunch from the cafeteria each day. Based on the table, she predicts that 60 students will buy pizza each day. Which statement about her prediction is true?
A. Her prediction is invalid because $\frac{1}{5}$ of 50 is 10 .
B. Her prediction is invalid because $\frac{1}{4}$ of 300 is 75 .
C. Her prediction is valid because $120 \%$ of 50 is 60 .
D. Her prediction is valid because $20 \%$ of 300 is 60 .
6. Alvin is taking a bus on a ski trip. The bus traveled 174 miles in the first 3 hours of the trip. If the ski resort is 696 miles from his home, which proportion could Alvin use to predict how many hours the bus trip to the ski resort will take?
F. $\frac{3}{174}=\frac{h}{696}$
G. $\frac{3}{174}=\frac{696}{h}$
H. $\frac{3}{h}=\frac{696}{174}$
J. $\frac{696}{3}=\frac{174}{h}$
7. The local museum hosts school field trips. They require the school to send 3 adults for every 21 children who go on the trip.

Part A
Complete this table to show the number of adults required for groups of different sizes.

| Adults | 3 |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Students | 21 | 35 | 77 | 14 |

Part B
If a school can send 15 adults on the field trip, how many students can go on the trip?
8. A window washer cleaned 38 windows in 2 hours. At this rate, how many windows did he clean in 7 hours?

Record your answer and fill in the bubbles on your answer document. Be sure to use the correct place value.
9. On Tuesday morning a school cafeteria served 16 gallons of orange juice during breakfast. How many cups are in 16 gallons?
A. 256 cups
B. 64 cups
C. 2,048 cups
D. 128 cups
10. Nell was baking a cake for her sister's birthday party. While baking the cake she needed to convert tablespoon measurements to teaspoons. The table below shows the relationship between the number of tablespoons and the number of equivalent teaspoons.

| Tablespoons | Teaspoons |
| :---: | :---: |
| 2 | 6 |
| 3 | 9 |
| 4 | 12 |
| 5 | 15 |

If Nell's recipe called for 12.5 tablespoons of one ingredient, how many teaspoons should she use?
F. 4.17 teaspoons
G. $\quad 16.5$ teaspoons
H. 22.5 teaspoons
J. 37.5 teaspoons
11. Michael made 525 birdhouses. He painted 3 out of every 5 of them red. The rest of them he painted green. How many birdhouses did he paint red?
A. 210
B. 175
C. 315
D. 350
12. Ruben adds some water to a glass of juice. The ratio of water to juice in his glass is now $4: 6$. Which fraction below represents this ratio?
F. $\frac{3}{5}$
G.
H. $\frac{2}{3}$
J. $\frac{2}{5}$
13. Edward has $65 \%$ of a garden planted with lilies. Which fraction is equivalent to $65 \%$ ?
A. $\frac{13}{2,000}$
B. $\frac{7}{20}$
C. $\frac{65}{1}$
D. $\frac{13}{20}$
14. In Carol's school, the ratio of teachers to students is 3 to 25 . Write this ratio in decimal form.
F. $\quad 0.12$
G. $\quad 1.2$
H. 8.3
J. 0.83
15. Sandra made 66 necklaces to sell. She sold 15 on Monday and 27 on Tuesday. What fraction of her necklaces does she still have to sell?
A. $7 / 11$
B. $4 / 11$
C. $3 / 11$
D. $2 / 11$

