## Unit 8: Proportional Relationships

Review Worksheet Lessons 1-4
Use the table to write each ratio three different ways.

1. Card Games to Electronic System Games
2. Board Games to All Games
3. All Games to Electronic Hand Held Games

| Games Owned by Joelle |  |
| :--- | :---: |
| Card Games | 5 |
| Board Games | 16 |
| Electronic Hand Held Games | 3 |
| Electronic System Games | 12 |

4. Write three equivalent ratios to compare the number of rectangular prisms with the number of cylinders in the box.


Use the table to write each ratio as a fraction in lowest terms.
5. Racing Games to Strategy Games
6. Word Games to All Games
7. All Games to Fantasy Games

| Games Owned by Trenton |  |
| :--- | :---: |
| Racing Games | 10 |
| Fantasy Games | 6 |
| Strategy Games | 12 |
| Word Games | 8 |

8. Craig earns $\$ 45.60$ for 12 hours of work. Gabriella earns $\$ 29.60$ for 8 hours of work. Who has the better hourly rate of pay?
9. There are 66 students on a wrestling team. The ratio of sixth graders to seventh graders is 5:6. How many sixth graders are on the team? How many seventh graders are on the team?
10. A 36 ounce box of Hot and Spicy! crackers costs $\$ 4.32$. A 20 ounce box of Hot and Spicy! crackers costs $\$ 2.60$. Which is the better buy?
11. Tools for Us sells switch plates. The table below shows the price of the switch plates. Predict how much a customer will pay for 7 switch plates. Predict how much a customer will pay for 22 switch plates.

| Number of Switch Plates | 5 | 10 | 15 | 20 | 25 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Cost $(\$)$ | 5.60 | 11.20 | 16.80 | 22.40 | 28.00 |

12. Tyrone swims laps every day during swim team practice. The table shows how long it takes him to swim different number of laps. Predict how long it will take Tyrone to swim 3 laps. Predict how long it will take Terra to swim 11 laps.

| Number of Labs | 2 | 4 | 6 | 8 | 10 | 12 | 14 | 16 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Time $(\mathrm{min})$ | 1.6 | 3.2 | 4.8 | 6.4 | 8.0 | 9.6 | 11.2 | 12.8 |

Copy each table. Complete each table by finding the missing ratios.
13.

| 3 | 4 |  | 8 | 12 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 15 |  | 25 | 40 |  | 80 |

14. 

| 4 | 8 |  | 32 | 48 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 48 | 60 | 192 |  | 360 |

15. A recipe calls for 4 cups of milk and 6 cups of flour. If the recipe is reduced, how many cups of flour should be used with 1 cup of milk? Write and solve a proportion. Show all work.

Find the value of $\boldsymbol{x}$ in each proportion. Show all work.
16. $\frac{x}{12}=\frac{5}{15}$
17. $\frac{6}{8}=\frac{x}{20}$
18. $\frac{4}{x}=\frac{10}{15}$
19. $\frac{10}{12}=\frac{15}{x}$

Create a coordinate grid.
20. Graph the coordinate $(3,4.5)$ and label the point $\mathbf{A}$.
21. Starting at point $\mathbf{A}$, move 2 units to the left and 3 units down. Label this point $\mathbf{B}$.
22. What are the coordinates of point $\mathbf{B}$ ?
23. Graph the coordinates $(6,1.5)$ and label the point $\mathbf{C}$.
24. Starting at point $\mathbf{C}$, move 1 unit to the left and 5 units up. Label this point $\mathbf{D}$.
25. What are the coordinates of point $\mathbf{D}$ ?

