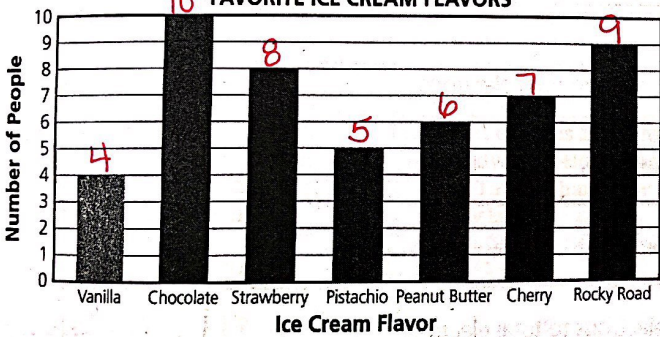


Unit 2 Study Guide: Ratios and Proportions

Name: Key Period: _____ Due Date: _____

What are the 3 ways to write a ratio? fraction, word "to", colon (:)

Ratios		Standard- RP.1																	
<p>FAVORITE ICE CREAM FLAVORS</p>  <table border="1" style="margin: 10px auto; border-collapse: collapse;"> <caption>Favorite Ice Cream Flavors Data</caption> <thead> <tr> <th>Ice Cream Flavor</th> <th>Number of People</th> </tr> </thead> <tbody> <tr><td>Vanilla</td><td>4</td></tr> <tr><td>Chocolate</td><td>10</td></tr> <tr><td>Strawberry</td><td>8</td></tr> <tr><td>Pistachio</td><td>5</td></tr> <tr><td>Peanut Butter</td><td>6</td></tr> <tr><td>Cherry</td><td>7</td></tr> <tr><td>Rocky Road</td><td>9</td></tr> </tbody> </table>		Ice Cream Flavor	Number of People	Vanilla	4	Chocolate	10	Strawberry	8	Pistachio	5	Peanut Butter	6	Cherry	7	Rocky Road	9	<p>1. Write the ratio of chocolate to rocky road all three ways. Simplify if possible.</p> <p style="color: red;">10 : 9</p> <p style="color: red;">10 to 9</p> <p style="color: red;">$\frac{10}{9}$</p>	<p>2. Write the ratio of strawberry to total ice cream flavors all three ways. Simplify if possible.</p> <p style="color: red;">8 : 7</p> <p style="color: red;">8 to 7</p> <p style="color: red;">$\frac{8}{7}$</p>
Ice Cream Flavor	Number of People																		
Vanilla	4																		
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<p>3. Write the ratio of vanilla to strawberry all three ways. Simplify if possible.</p> <p style="color: red;">4 to 8 → 1 to 2</p> <p style="color: red;">4 : 8 → 1 : 2</p> <p style="color: red;">$\frac{4}{8} \rightarrow \frac{1}{2}$</p>	<p>4. Write the ratio of chocolate to vanilla & strawberry in all three ways. Simplify if possible.</p> <p style="color: red;">10 to 12 → 5 to 6</p> <p style="color: red;">5 : 6</p> <p style="color: red;">$\frac{5}{6}$</p>	<p>5. Write the ratio of the number of people whose favorite flavor is chocolate and rocky road to all people. Simplify if possible.</p> <p style="color: red;">19 to 49</p> <p style="color: red;">19 : 49</p> <p style="color: red;">$\frac{19}{49}$</p>	<p>6. Write the ratio of peanut butter to strawberry and chocolate. Simplify if possible.</p> <p style="color: red;">6 to 18</p> <p style="color: red;">↓</p> <p style="color: red;">1 to 3</p>																

Unit Rate Standard-RP.2, 3b

7. Food Mart sells 12 water bottles for \$2.69. What is the unit price per water bottle at Food Mart?

$$\begin{array}{r} 0.22 \\ 12 \overline{) 2.69} \\ \underline{-24} \\ 29 \\ \underline{-24} \\ 5 \end{array}$$

\$0.22
1 water bottle

8. Roger's Market sells 6 water bottles for \$1.49. What is the unit price per water bottle at Roger's Market?

$$\begin{array}{r} .22 \\ 6 \overline{) 1.49} \\ \underline{-12} \\ 29 \\ \underline{-24} \\ 5 \end{array}$$

\$0.22
1 water bottle

9. Save-A-Lot sells 36 water bottles for \$5.99. What is the unit price at Save-A-Lot?

$$\begin{array}{r} 0.16 \\ 36 \overline{) 5.99} \\ \underline{-36} \\ 239 \\ \underline{-216} \\ 23 \end{array}$$

\$0.16
1 water bottle

10. Which store has the best unit price for water bottles? Explain in complete sentences how you know.

Save-A-Lot has the best value because they are only 16 cents a bottle.

11. Denise does 225 jumping jacks in 3 minutes. At this rate, how many jumping jacks can she do in 5 minutes?

$$\frac{225 \text{ JJ}}{3 \text{ min}} \div 3 = \frac{75 \text{ JJ}}{1 \text{ min}}$$

$$75 \times 5 = 375 \text{ JJ}$$

5 min

12. Target charges \$2.49 for 3 candy bars. How much does Target charge for 7 candy bars?

$$\begin{array}{r} 0.83 \\ 3 \overline{) 2.49} \\ \underline{-24} \\ 9 \\ \underline{-9} \\ 0 \end{array}$$

\$0.83
1 bar

$$\begin{array}{r} 5.81 \\ 7 \overline{) 5.81} \\ \underline{-56} \\ 21 \\ \underline{-21} \\ 0 \end{array}$$

\$5.81 for 7 bars

13. A car travels 450 miles in 6 hours. How far did the car travel in 9 hours?

$$\begin{array}{r} 75 \\ 6 \overline{) 450} \\ \underline{-42} \\ 30 \\ \underline{-30} \\ 0 \end{array}$$

75
x 9
675

75 m
675 miles

14. Kroger charges \$18.32 for 8 lbs of chicken. How much does Kroger charge for 3 lbs of chicken?

$$\begin{array}{r} 2.29 \\ 8 \overline{) 18.32} \\ \underline{-16} \\ 23 \\ \underline{-16} \\ 72 \\ \underline{-72} \\ 0 \end{array}$$

2.29
x 3
6.87

\$6.87

Ratio Tables Standard-RP.3a

15. Luis bakes pancakes with a ratio of flour to liquid of 3 to 2. Use this information to complete the table below

Flour (cups)	Liquid (cups)
3	2
6	4
15	10
36	24

16. John is making floral arrangements for the nursing home. John has a ratio of 7 roses to 9 sunflowers. Use this information to complete the table below.

Roses	Sunflowers
7	9
28	36
49	63
70	90

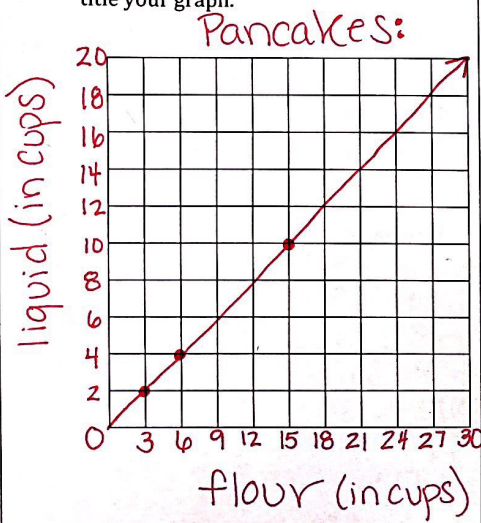
17. Ms. Rankin saved \$760 in 8 months to renew her annual pass to Disney World. Complete the table to show Ms. Rankin's savings.

Months	Savings
1	95
3	\$285
5	\$475
7	\$665

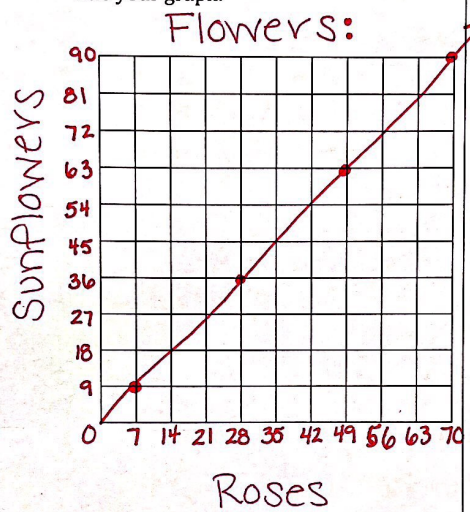
$$\begin{array}{r} 95 \\ 8 \overline{) 760} \\ \underline{-72} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

Graphing Ratio Table Standard- RP.3a

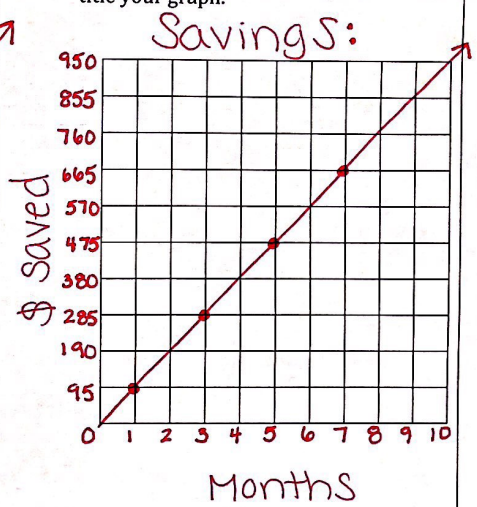
18. Plot your ratio table for question 15 in the space provided. Be sure to label and title your graph.



19. Plot your ratio table for question 16 in the space provided. Be sure to label and title your graph.



20. Plot your ratio table for question 17 in the space provided. Be sure to label and title your graph.



Equivalent Ratios Standard- RP.3a, 3d

21. George's dad is booking a hotel for their upcoming family vacation. He wants to spend no more than \$85 per day. Select all of the hotels fit into their budget?

Hotel	Amount Charged
Hilton	\$180 for 2 days
Hampton Inn	\$336 for 4 days
Best Western	\$255 for 3 days
Marriott	\$465 for 5 days



Hilton $\frac{180 \div 2}{2 \div 2} = \frac{\$90}{1 \text{ Night}}$

Hampton Inn $\frac{336 \div 4}{4 \div 4} = \frac{\$84}{1 \text{ Night}}$

Best Western $\frac{255 \div 3}{3 \div 3} = \frac{\$85}{1 \text{ Night}}$

Marriott $\frac{465 \div 5}{5 \div 5} = \frac{\$93}{1 \text{ Night}}$