

# Ratios & Proportions Mini-Mystery **CLUE** Sheet

Name: \_\_\_\_\_

<p>1) Solve for the variable in both proportions:</p> $\frac{5}{6} = \frac{G}{24} \qquad \frac{1}{7} = \frac{J}{84}$ <p>The name of the suspect starts with the same letter as the proportion with the <b>greater</b> solution. Which has the greater solution: G or J?</p> <p><b>Suspect's Name Starts With:</b> _____</p>	<p>2) The suspect played a weight-guessing game. The scale is rigged so that 1 actual pound shows up on the scale as 0.8 pounds. If the scale shows 104 pounds when the suspect steps on it, how much do they actually weigh? (Fill in the rest of the proportion and solve.)</p> $\frac{\text{actual weight}}{\text{scale weight}} = \frac{1}{0.8} = \frac{\quad}{\quad}$ <p><b>Suspect's Weight:</b> _____</p>	<p>3) The suspect took a selfie with a clown on stilts. The ratio of the <b>suspect's height to the clown's height</b> is 4:7. If the clown is 112 inches tall, how tall is the suspect? (Write a proportion and solve.)</p> <p><b>Suspect's Height:</b> _____</p>
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You're almost there! The last clue you need is the suspect's favorite hobby. Solve problems 4 - 10 and use the Code Cracker to match a letter with each answer. Then, unscramble the letters to reveal the final clue!



\$4.20 for 3 Dogs



\$2.32 per Drink



2 tickets for \$13



2 Bags for \$3.50

<p>4) What is the cost per corn dog (unit rate)?</p> <p><b>Solution:</b> _____</p>	<p>5) How many bags of popcorn can be bought with \$5.25?</p> <p><b>Solution:</b> _____</p>	<p>6) If the suspect spent \$32.50 on tickets, how many tickets were purchased?</p> <p><b>Solution:</b> _____</p>
<p>7) If you have \$25, is that enough for 4 tickets?</p> <p><b>Solution:</b> _____</p>	<p>8) How much does 7 bags of popcorn cost?</p> <p><b>Solution:</b> _____</p>	<p>9) If the suspect spent \$7 on corn dogs, how many were purchased?</p> <p><b>Solution:</b> _____</p>
<p>10) If the suspect spent \$10.50 on popcorn, how many bags were purchased?</p> <p><b>Solution:</b> _____</p>	<p>Use the <b>Code Cracker</b> to match a letter with each answer on 4-10. <b>Write the letters here:</b></p> <p><b>Unscramble</b> to find the <b>Suspect's Favorite Hobby:</b></p> <p>_____</p>	<p><b>SUSPECT'S IDENTITY:</b></p>

# Ratios & Proportions Mini-Mystery **CLUE** Sheet



Name: \_\_\_\_\_

<p>1) Solve for the variable in both proportions:</p> $\frac{5}{6} = \frac{G}{24} \qquad \frac{1}{7} = \frac{J}{84}$ <p>The name of the suspect starts with the same letter as the proportion with the <b>greater</b> solution. Which has the greater solution: G or J?</p> <p><b>Suspect's Name Starts With:</b> _____</p>	<p>2) The suspect played a weight-guessing game. The scale is rigged so that 1 actual pound shows up on the scale as 0.8 pounds. If the scale shows 104 pounds when the suspect steps on it, how much do they actually weigh? (Fill in the rest of the proportion and solve.)</p> $\frac{\text{actual weight}}{\text{scale weight}} = \frac{1}{0.8} = \frac{\quad}{\quad}$ <p><b>Suspect's Weight:</b> _____</p>	<p>3) The suspect took a selfie with a clown on stilts. The ratio of the <b>suspect's height to the clown's height</b> is 4:7. If the clown is 112 inches tall, how tall is the suspect? (Write a proportion and solve.)</p> <p><b>Suspect's Height:</b> _____</p>
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You're almost there! The last clue you need is the suspect's favorite hobby. Solve problems 4 - 10 and use the Code Cracker to match a letter with each answer. Then, unscramble the letters to reveal the final clue!



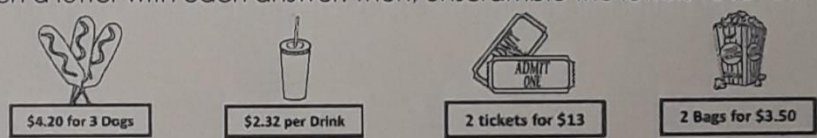
<p>4) What is the cost per corn dog (unit rate)?</p> <p><b>Solution:</b> _____</p>	<p>5) How many bags of popcorn can be bought with \$5.25?</p> <p><b>Solution:</b> _____</p>	<p>6) If the suspect spent \$32.50 on tickets, how many tickets were purchased?</p> <p><b>Solution:</b> _____</p>
<p>7) If the suspect bought 3 tickets with a \$20 bill, would there be enough change left over to buy a drink?</p> <p><b>Solution:</b> _____</p>	<p>8) How much does 7 bags of popcorn cost?</p> <p><b>Solution:</b> _____</p>	<p>9) If the suspect spent \$7 on corn dogs, how many were purchased?</p> <p><b>Solution:</b> _____</p>
<p>10) If the suspect spent \$12.82 on 1 drink and some popcorn, how many bags of popcorn were purchased?</p> <p><b>Solution:</b> _____</p>	<p>Use the <b>Code Cracker</b> to match a letter with each answer on 4-10. <b>Write the letters here:</b></p> <p><b>Unscramble</b> to find the <b>Suspect's Favorite Hobby:</b></p> <p>_____</p>	<p><b>SUSPECT'S IDENTITY:</b></p>

# Ratios & Proportions Mini-Mystery CLUE Sheet

Name: Key

<p>1) Solve for the variable in both proportions:</p> $\frac{5}{6} = \frac{G}{24} \qquad \frac{1}{7} = \frac{J}{84}$ <p style="text-align: center;"><math>G=20 \qquad J=12</math></p> <p>The name of the suspect starts with the same letter as the proportion with the <b>greater</b> solution. Which has the greater solution: G or J?</p> <p>Suspect's Name Starts With: <u>G</u></p>	<p>2) The suspect played a weight-guessing game. The scale is rigged so that 1 actual pound shows up on the scale as 0.8 pounds. If the scale shows 104 pounds when the suspect steps on it, how much do they actually weigh? (Fill in the rest of the proportion and solve.)</p> $\frac{\text{actual weight}}{\text{scale weight}} = \frac{1}{0.8} = \frac{x}{104}$ <p style="text-align: center;"><math>0.8x = 104</math></p> <p>Suspect's Weight: <u>130</u></p>	<p>3) The suspect took a selfie with a clown on stilts. The ratio of the <b>suspect's height to the clown's height</b> is 4:7. If the clown is 112 inches tall, how tall is the suspect? (Write a proportion and solve.)</p> $\frac{\text{suspect}}{\text{clown}} = \frac{4}{7} = \frac{x}{112}$ <p style="text-align: center;"><math>7x = 448</math></p> <p>Suspect's Height: <u>64</u></p>
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You're almost there! The last clue you need is the suspect's favorite hobby. Solve problems 4 - 10 and use the Code Cracker to match a letter with each answer. Then, unscramble the letters to reveal the final clue!



<p>4) What is the cost per corn dog (unit rate)?</p> $\begin{array}{r} 1.40 \\ 3 \overline{) 4.20} \\ \underline{-3} \phantom{0} \\ 12 \phantom{0} \\ \underline{-12} \phantom{0} \\ 0 \end{array}$ <p>Solution: <u>\$1.40</u></p>	<p>5) How many bags of popcorn can be bought with \$5.25?</p> $\frac{\text{bags}}{\$} = \frac{2}{3.50} = \frac{x}{5.25}$ <p style="text-align: center;"><math>3.50x = 10.50</math></p> <p>Solution: <u>3</u></p>	<p>6) If the suspect spent \$32.50 on tickets, how many tickets were purchased?</p> $\frac{\text{tickets}}{\$} = \frac{2}{13} = \frac{x}{32.50}$ <p style="text-align: center;"><math>13x = 65</math></p> <p>Solution: <u>5</u></p>
<p>7) If you have \$25, is that enough for 4 tickets?</p> <p><math>2 \text{ tickets} = \\$13</math> <math>4 \text{ tickets} = \\$26</math></p> <p>Solution: <u>No</u></p>	<p>8) How much does 7 bags of popcorn cost?</p> $\frac{\text{bags}}{\$} = \frac{2}{3.50} = \frac{7}{x}$ <p style="text-align: center;"><math>2x = 24.50</math></p> <p>Solution: <u>\$12.25</u></p>	<p>9) If the suspect spent \$7 on corn dogs, how many were purchased?</p> $\frac{\text{corn dogs}}{\$} = \frac{3}{4.20} = \frac{x}{7}$ <p style="text-align: center;"><math>4.20x = 21</math></p> <p>Solution: <u>5</u></p>
<p>10) If the suspect spent \$10.50 on popcorn, how many bags were purchased?</p> $\frac{\text{popcorn}}{\$} = \frac{2}{3.50} = \frac{x}{10.50}$ <p style="text-align: center;"><math>3.50x = 21</math> <math>x = 6</math></p> <p>Solution: <u>6</u></p>	<p>Use the <b>Code Cracker</b> to match a letter with each answer on 4-10. Write the letters here:</p> <p style="text-align: center;"><b>SUSPECT'S IDENTITY:</b></p> <p>Unscramble to find the Suspect's Favorite Hobby:</p>	