



MIXED RATIO PROBLEMS 7:3

1. Aquarium Fish

A pet store keeps guppies and tetras in a ratio of 7: 9.



If there are 42 guppies, how many tetras are there?

2. Pizza Toppings

A pizza shop makes a special pizza using pepperoni and mushrooms in a ratio of 5: 2.



If a large batch uses 125 slices of pepperoni, how many mushroom slices are needed?

3. Video Game Points

In a game, you have to collect gold and silver coins. The coins are valued with ratio 1 gold coin : 15 silver coins.



To win the game, you need to collect the equivalent of 10 gold coins.

So far Captain has 7 gold coins and 42 silver coins. How much more does he need?

4. Scale Drawing – Skate Park

A skate park blueprint uses a scale of 1 in: 3 ft.



A ramp is drawn as $4 \frac{1}{4}$ in long. How long is the real ramp?

5) Smoothie Bar

A smoothie uses mango and pineapple in a ratio of 3: 5.



If the smoothie contains 100 oz of both fruit, how many ounces of mango are used?

6) Ratio Table – Road Trip

Captain travels 180 miles in 3 hours at a steady speed. Complete the ratio table:

Time (hours)	3	5	7	10
Distance (mi)				

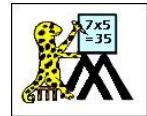


7) Anyone for a taxi?

A taxi charges a base fare (flag drop) fee of \$10 plus a distance fee of \$1.50 for every mile.



Tyger pays \$28 for his taxi fare. How far did he travel?



MIXED RATIO PROBLEMS 7:3 ANSWERS

<p>1) Aquarium Fish</p> <p>A pet store keeps guppies and tetras in a ratio of 7: 9. If there are 42 guppies, how many tetras are there?</p>	 <p>7 guppies : 9 tetras 63 guppies : ? tetras $42 \div 7 = 6$ so multiply by 6 $9 \text{ tetras} \times 6 = 54$ There are 54 tetras.</p>										
<p>2) Pizza Toppings</p> <p>A pizza shop makes a special pizza using pepperoni and mushrooms in a ratio of 5: 2. If a large batch uses 125 slices of pepperoni, how many mushroom slices are needed?</p>	 <p>5 pepperoni : 2 mushrooms 125 pepperoni : ? mushrooms $125 \div 5 = 25$ so multiply by 25 2 mushrooms $\times 25 = 50$ So 50 mushroom slices are needed</p>										
<p>3) Video Game Points</p> <p>In a game, you have to collect gold and silver coins. The coins are valued with ratio 1 gold coin : 15 silver coins. To win the game, Captain needs to collect the equivalent of 10 gold coins. So far he has 7 gold coins and 42 silver coins. How much more does he need?</p>	 <p>1 gold : 15 silver Convert 42 silver to gold 2 gold : 30 silver So 42 silver = 2 gold 12 silver 7 gold 42 silver = 9 gold 12 silver. He needs 3 more silver coins.</p>										
<p>4) Scale Drawing – Skate Park</p> <p>A skate park blueprint uses a scale of 1 in: 3 ft. A ramp is drawn as $4 \frac{1}{4}$ in long. How long is the real ramp?</p>	 <p>1 in : 3 ft $4 \frac{1}{4}$ in : ? ft $3 \times 4 \frac{1}{4} = (3 \times 4) + (3 \times \frac{1}{4}) = 12 + \frac{3}{4} = 12 \frac{3}{4}$ So $4 \frac{1}{4}$ in : $12 \frac{3}{4}$ ft The real ramp is $12 \frac{3}{4}$ ft long</p>										
<p>5) Smoothie Bar</p> <p>A smoothie uses mango and pineapple in a ratio of 3: 5. If the smoothie contains 100 oz of both fruit, how many ounces of mango are used?</p>	 <p>3 mango : 5 pineapple Total is $3 + 5 = 8$ $100 \text{ oz} \div 8 = 12 \frac{1}{2}$ so multiply by $12 \frac{1}{2}$ $3 \text{ oz} \times 12 \frac{1}{2} = (3 \times 12) + (3 \times \frac{1}{2}) = 36 + 1 \frac{1}{2} = 37 \frac{1}{2}$ $37 \frac{1}{2} \text{ oz}$ of mango are needed</p>										
<p>6) Ratio Table – Road Trip</p> <p>Captain travels 180 miles in 3 hours at a steady speed. Complete the ratio table:</p> <table border="1" data-bbox="164 1579 882 1691"> <thead> <tr> <th>Time (hours)</th> <th>3</th> <th>5</th> <th>7</th> <th>10</th> </tr> </thead> <tbody> <tr> <th>Distance (mi)</th> <td>180</td> <td>300</td> <td>420</td> <td>600</td> </tr> </tbody> </table>	Time (hours)	3	5	7	10	Distance (mi)	180	300	420	600	 <p>3 hours : 180 miles → divide by 3 1 hour : 60 miles 5 hours : $60 \times 5 = 300$ miles 7 hours : $60 \times 7 = 420$ miles 10 hours : $60 \times 10 = 600$ miles</p>
Time (hours)	3	5	7	10							
Distance (mi)	180	300	420	600							
<p>7) Anyone for a taxi?</p> <p>A taxi charges a base fare (flag drop) fee of \$10 plus a distance fee of \$1.50 for every mile. Tyger pays \$28 for his taxi fare. How far did he travel?</p>	 <p>Subtract flag drop fee $\\$28 - \\$10 = \\$18$ We have $\\$1.50 : 1$ mile. $\\$18 : ?$ miles $\\$18 \div \\$1.50 = 12$ So we have $\\$18 : 12$ miles He traveled 12 miles</p>										