







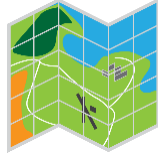







MIXED RATIO PROBLEMS 7:2

<p>1. Scale Drawing – Map Distance</p> <p>A map uses a scale of 1 cm : 4 miles.</p> <p>Two towns are $7\frac{1}{2}$ cm apart on the map.</p> <p>What is the real distance between them?</p>	
<p>2. Recipe Scaling</p> <p>A typical cookie dough uses flour to sugar to butter in the ratio 3:1:2.</p> <p>If I use 3 cups of flour, 1 cup of sugar and 2 cups of butter it makes 24 cookies.</p> <p>How much flour is needed to make 40 cookies?</p>	
<p>3. Mixing Paint</p> <p>To make a shade of green paint, the ratio of blue paint to yellow paint is 3: 5.</p> <p>I mix up $\frac{3}{4}$ pint of green paint.</p> <p>How many fluid ounces of blue and yellow paint did I use?</p>	
<p>4. Comparing Speeds</p> <p>A cyclist travels at an average speed of 12 miles every 45 minutes.</p> <p>At this speed, how far will they travel in 2 hours?</p>	
<p>5. Phone Data</p> <p>A mobile phone plan charges \$11 for every 4 GB of data.</p> <p>At the same rate, how much would 6 GB of data cost?</p>	
<p>6. Basketball Practice</p> <p>During drills, the coach wants players to take layups and free throws in a ratio of 5: 3.</p> <p>If a player takes 72 shots, how many should be free throws?</p>	



MIXED RATIO PROBLEMS 7:2 ANSWERS

<p>1. Scale Drawing – Map Distance</p> <p>A map uses a scale of 1 cm : 4 miles.</p> <p>Two towns are $7\frac{1}{2}$ cm apart on the map.</p> <p>What is the real distance between them?</p>	 <p>1 cm : 4 miles 7 cm : 28 miles $\frac{1}{2}$ cm : 2 miles $7\frac{1}{2}$ cm : 30 miles The distance between them is 30 miles.</p>
<p>2. Recipe Scaling</p> <p>A typical cookie dough uses flour to sugar to butter in the ratio 3:1:2.</p> <p>If I use 3 cups of flour, 1 cup of sugar and 2 cups of butter it makes 24 cookies.</p> <p>How much flour is needed to make 40 cookies?</p>	 <p>3 cups of flour : 24 cookies → divide by 3 1 cup of flour : 8 cookies $40 \div 8 = 5$ so multiply by 5 5 cups of flour : 40 cookies We need 5 cups of flour.</p>
<p>3. Mixing Paint</p> <p>To make a shade of green paint, the ratio of blue paint to yellow paint is 3:5.</p> <p>I mix up $\frac{3}{4}$ pint of green paint.</p> <p>How many fluid ounces of blue and yellow paint did I use?</p>	 <p>1 pint = 16 fluid ounces $\frac{3}{4}$ pint = $\frac{3}{4} \times 16 = 12$ fluid ounces 3 blue : 5 yellow $3 + 5 = 8$ $12 \div 8 = 1\frac{1}{2}$ so multiply by $1\frac{1}{2}$ $4\frac{1}{2}$ blue : $7\frac{1}{2}$ yellow We need $4\frac{1}{2}$ fluid ounces of blue and $7\frac{1}{2}$ fluid ounces of yellow paint.</p>
<p>4. Comparing Speeds</p> <p>A cyclist travels at an average speed of 12 miles every 45 minutes.</p> <p>At this speed, how far will they travel in 2 hours?</p>	 <p>12 miles : 45 minutes → divide by 3 4 miles : 15 minutes → multiply by 4 16 miles : 60 minutes (1 hour) → multiply by 2 Answer 32 miles in 2 hours</p>
<p>5. Phone Data</p> <p>A mobile phone plan charges \$11 for every 4 GB of data.</p> <p>At the same rate, how much would 6 GB of data cost?</p>	 <p>\$11 : 4 GB → divide by 2 \$5.50 : 2 GB → multiply by 3 \$16.50 : 6 GB So 6 GB costs \$16.50</p>
<p>6. Basketball Practice</p> <p>During drills, the coach wants players to take layups and free throws in a ratio of 5: 3.</p> <p>If a player takes 72 shots, how many should be free throws?</p>	 <p>5 layups : 3 free throws Total is $5 + 3 = 8$ $72 \div 8 = 9$ so multiply by 9 $5 \times 9 = 45$ layups $3 \times 9 = 27$ free throws So 27 shots are free throws</p>