Name Date

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 ¼ 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?

Name Date

MIXED RATIO PROBLEMS 7:3 ANSWERS

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? 	7 guppies : 9 tetras 63 guppies : ? tetras 42 ÷ 7 = 6 so multiply by 6 9 tetras x 6 = 54 There are 54 tetras.
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?	5 pepperoni : 2 mushrooms 125 pepperoni : ? mushrooms 125 ÷ 5 = 25 so multiply by 25 2 mushrooms x 25 = 50 So 50 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, 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?	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.
4) **Scale Drawing – Skate Park** A skate park blueprint uses a scale of 1 in: 3 ft. A ramp is drawn as 4 ¼ in long. How long is the real ramp? 	1 in : 3 ft 4 ¼ in : ? ft 3 x 4 ¼ = (3 x 4) + (3 x ¼) = 12 + ¾ = 12 ¾ So 4 ¼ in : 12 ¾ ft The real ramp is 12 ¾ ft long
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?	3 mango : 5 pineapple Total is 3 + 5 = 8 100 oz ÷ 8 = 12 ½ so multiply by 12 ½ 3 oz x 12 ½ = (3 x 12) + (3 x ½) = 36 + 1 ½ = 37 ½ 37 ½ oz of mango are needed
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)** | 180 | 300 | 420 | 600 	3 hours : 180 miles → divide by 3 1 hour : 60 miles 5 hours : 60 x 5 = 300 miles 7 hours : 60 x 7 = 420 miles 10 hours : 60 x 10 = 600 miles
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? 	Subtract flag drop fee $28 - $10 = $18 We have $1.50 : 1 mile. $18 : ? miles $18 ÷ $1.50 = 12 So we have $18 : 12 miles He traveled 12 miles