

- Simplify these ratios.
 - 16 : 40
 - 35 : 15
 - 24 : 16
 - 40 min : 1 h
 - 400 g : 2 kg
 - 6 h : 3 days
 - 7 cm : 21 mm
 - 240 mL : 1 L
- In a cake mix, the ratio of flour to milk by volume is 5 : 3. If there is 750 mL of flour, how much milk is there?
- Ivy and Jackie shared prizemoney in the ratio \$110 : \$165. Convert this to a simple ratio.
- William bet on a horse which won at odds of 7 : 2 (winnings: bet). If he bet \$12, how much did he win?
- A street map has the scale 1 : 24 750. What distance does 1 cm on the map represent?
- In a survey, there were 168 Labor and 216 Liberal supporters. What was the ratio of Labor to Liberal supporters?
- At the kindergarten, there were 9 teachers for 105 children. What was the teacher : child ratio?
- The ratio of lemon cordial to water in a drink is 2 : 7. How many millilitres of each are needed to make 450 mL of drink?
- A photocopier reduces a picture in the ratio 4 : 5. The original is 30 cm long. How long would the copy be?
- The ratio of students who walk : bus : car to school is 8 : 3 : 1. If 264 students take the bus, how many:
 - walk?
 - travel by car?
- What is the scale on a city map if 5 cm represents 450 m?
- At the football game, the ratio of Bulldogs supporters to Raiders supporters was 13 : 12. How many of each were in a crowd totalling 44 500?
- The ratio of adults to children was 5 : 6. If there were 210 adults, how many children were there?
- Flour and water are mixed in the ratio 2 : 5 to make paste. How much paste is made with 300 mL of water?
- Cindy and Carmen share the rent in the ratio 5 : 4. If the rent is \$252, how much does each pay?
- At the RSPCA, the ratio of dogs to cats is 5 : 3. If there are 225 dogs, how many cats are there?
- On Sunday, 11 357 170 Australians watched cricket or tennis on TV, in the ratio 7 : 4. How many watched each sport?
- A fruit drink has 140 mL of orange juice and 40 mL of mango juice. What is the ratio of orange juice to mango juice?
- Robert and Debbie own a business with shares in the ratio 3 : 5. How should they share a profit of \$13 600?
- A house plan has the scale ratio 1 : 25. How long should the length of the lounge room appear on the plan if its actual length is 4.75 m?
- A house has a floor area of 155 m². If the ratio of living area to sleeping area is 3 : 2, find the sizes of the living and sleeping areas.
- In Kerrie's test, the ratio of correct to incorrect answers was 13 : 2. How many questions were there if she answered six questions incorrectly?
- Lawnmower fuel should be made up of 3 parts petrol and 1 part oil. How much of each is needed to mix 5 L of fuel?
- A soccer team's win : loss ratio was 8 : 5. How many wins and losses over 39 games was this?
- Mortar is made up of 2 parts cement and 5 parts sand. Find the amounts of cement and sand in 28 kg of mortar.

ANSWERS - RATIO PROBS. - YR 10 - WORKSHEET 1-08

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|---|---|
| <p>① a) 2:5
 b) 7:3
 c) 3:2
 d) 2:3
 e) 1:5
 f) 1:12
 g) 10:3
 h) 6:25</p> | <p>⑩ a) 704 b) 88
 ⑪ 1:9000
 ⑫ ^(B) 23140 : ^(R) 21360
 ⑬ 252 children
 ⑭ 420
 ⑮ \$140 : \$112
 ⑯ 135 cats
 ⑰ 7227290 : 4129880
 ⑱ 7:2
 ⑲ \$5100 : \$8500
 ⑳ 19 cm
 ㉑ 93 : 62
 ㉒ 45 quest's.
 ㉓ 3.75 L : 1.25 L.
 ㉔ 24 wins : 15 losses
 ㉕ 8 kg cement : 20 kg sand</p> |
| <p>② 450 mL
 ③ 2:3
 ④ \$42
 ⑤ 247.5 metres
 ⑥ 7:9
 ⑦ 3:35
 ⑧ 100 mL : 350 mL
 ⑨ 24 cm</p> | |