Name: _____

ASM Tuition Academy

Ratio Problems 2

Instructions:

- Use **black** ink or ball-point pen.
- Answer all questions.
- Answer the questions in the spaces provided
  - there may be more space than you need.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all you're working out.**

Information:

- The marks for each question are shown in brackets
  - use this as a guide as to how much time to spend on each question.

Advice:

- Read each question carefully before you start to answer it.
- Keep an eye on time.
- Try to answer every question.
- Check your answers if you have time at the end.

1. **The ratio of sparrows to parrots is 2:4**
   The ratio of fish to sparrows is 3:1

   Find the ratio of parrots to fish.
   Give your answer in its simplest form.

   _____

   (Total for question 1 is 2 marks)

2. **Given that   a:b = 5:6   and   b:c = 5:4**
   Find the ratio   a: b: c
   Give your answer in its simplest form.

   _____

   (Total for question 2 is 2 marks)

3. **Ali, Adnan and Adam share £44**
   The amount of Ali and Adnan get is in the ratio 7:3
   The amount of Adnan and Adam get is in the ratio 8:1

   How much does Ali get?

   _____

   (Total for question 3 is 3 marks)

4. **Hoorab, Edda and Gull share some sweets.**
   The amount of sweets Hoorab gets to the amount of sweets Edda gets is in the ratio 9:5.
   The amount of Hoorab gets to the amount of Gull gets is in the ratio 8:4
   Given Gull gets 18 more sweets than Hoorab.

   Work out how many sweets Edda gets.

   _____

   (Total for question 4 is 3 marks)

5. Given that   a:b = 2:6   and   a:c = 5:4

   Find the ratio   a: b: c
   Give your answer in its simplest form.

_____

(Total for question 5 is 2 marks)

6. Given that   a:c = 2:1   and   b:c = 3:7

   Find the ratio   a: b: c
   Give your answer in its simplest form.

_____

(Total for question 6 is 2 marks)

7. **There are pink sweets, yellow sweets and green sweets in a box.**
    The ratio of pink sweets to yellow sweets is 2:3
    The ratio of green sweets to yellow sweets is 6:19

    Work out the ratio of pink sweets to yellow sweets to green sweets.

    _____

    (Total for question 7 is 2 marks)

8. **A hockey ball team plays some games in a season. Each game was a win, a draw or a loss.**
    The ratio of the games they won to the games they did not win was 9:7
    The ratio of games they lost to games they did not lose was 1:7

    Given the team played less than 50 games, work out the highest amount of games they could have won.

    _____

    (Total for question 8 is 2 marks)

9. The points A, B, C and D lie in order on a straight line.

AB: BD = 5:2 and   AC: CD = 7:3

Find AB: BC: CD

_____

(Total for question 9 is 3 marks)

10. The points A, B, C and D lie in order on a straight line.

AB: BD = 3:5 and   AC: CD = 5:6

Find AB: BC: CD

_____

(Total for question 10 is 3 marks)

11. Adi and Barrera share some sweets in the ratio 9:3
Adi gets A sweets.
Barrera gets B sweets.

Zahra and Asif share the same amount of sweets as Adi and Barrera.
They share their sweets in the ratio 5:2

Zahra gets C sweets.
Asif gets D sweets.

Find A: B: C: D

_____

(Total for question 11 is 3 marks)

12. A and B are in the ratio 3:1
C and D are in the ratio 3:2

Given A + B = 2(C+D)

Find A: B: C: D

_____

(Total for question 12 is 3 marks)

13. Shizuka and Doraemon share some money in the ratio 2:5
Shizuka gets £L.
Doraemon gets £M.

Jian and Suneo share the same amount of money as Shizuka and Doraemon.
They share their money in the ratio 3:7

Jian gets £N.
Suneo gets £O.

Find L: M: N: O

_____

(Total for question 13 is 3 marks)

14. A and B are in the ratio 3:4
C and D are in the ratio 5:1

Given 3(A + B) = C+D

Find A: B: C: D

_____

(Total for question 14 is 3 marks)