Solving Ratios

Solving Ratios
Ratios can be used to solve problems. In this unit, you will be given ratios and use them to calculate new quantities.

Goal Post Method (Multiply & Divide)

EXAMPLE: For every 2 steps, 3 breaths are taken.
How many breaths are taken with 5 steps?

Write the problem like this:

2 steps : 3 breaths
5 steps : x breaths

$$x = \frac{5 \times 3}{2} = \frac{15}{2} = \textbf{7.5}$$

REMEMBER:
A soccer player is trying to score a goal.
To find the value of **x**, multiply the goal posts and divide by the goalie.

For every 5 steps,
7.5 breaths are taken.

Instructions: Solve the ratios below, simplifying where possible.

1

1	:	3
x	:	9

2

2	:	3
6	:	x

3

4	:	5
8	:	x

4

2	:	7
x	:	14

5

3	:	5
x	:	25

6

5	:	4
15	:	x

7

4	:	9
8	:	x

8

8	:	5
x	:	10

9

3	:	7
9	:	x

10

12	:	5
x	:	10

11

2	:	11
x	:	33

12

15	:	3
30	:	x

13

7	:	10
14	:	x

14

5	:	12
x	:	24

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1

2	:	3
x	:	15

2

4	:	3
12	:	x

3

7	:	2
14	:	x

4

5	:	6
10	:	x

5

8	:	3
x	:	9

6

5	:	7
x	:	14

7

6	:	11
12	:	x

8

9	:	8
x	:	16

9

5	:	3
x	:	9

10

3	:	7
12	:	x

11

12	:	5
x	:	5

12

7	:	5
x	:	12

13

8	:	7
12	:	x

14

7	:	10
x	:	8