Calculating Area

I can calculate the area of rectangles and squares.

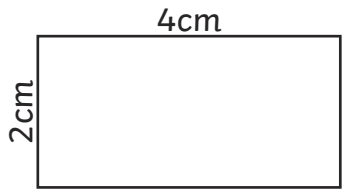
1) Fill in the answers to the 4 times table. This will help you in the next question.

1 × 4 =	4 × 4 =	7 × 4 =	10 × 4 =
2 × 4 =	5 × 4 =	8 × 4 =	11 × 4 =
3 × 4 =	6 × 4 =	9 × 4 =	12 × 4 =

2) Calculate the area of these shapes in cm² and write a multiplication fact to show how you found the area. You can use the 4 times table that you completed in the first question to help. The shapes in these questions may not be drawn to scale.

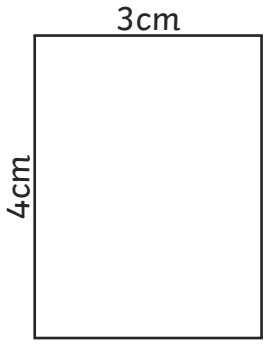
The first one has been done for you.

a)



Multiplication fact:
4 × 2 = 8
Area = 8 cm²

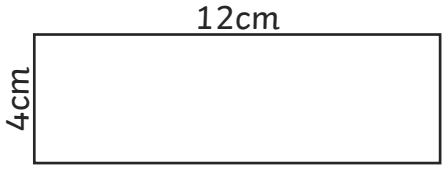
b)



Multiplication fact:

Area = _____ cm²

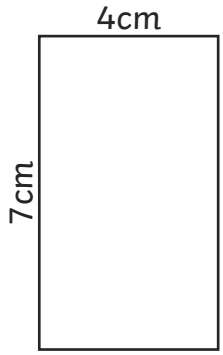
c)



Multiplication fact:

Area = _____ cm²

d)



Multiplication fact:

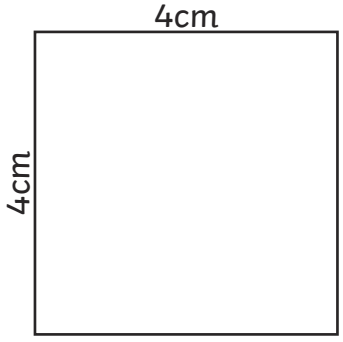
Area = _____ cm²

e)

Multiplication fact:

Area = _____ cm²

f)

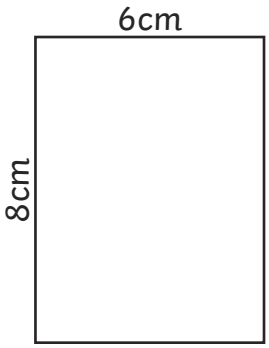


Multiplication fact:

Area = _____ cm²

3) Now use your knowledge of other times tables to calculate the areas of these shapes and write a multiplication fact to show how you found the area.

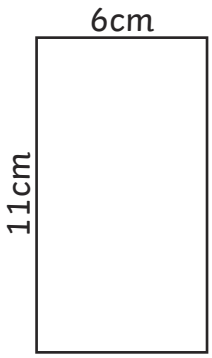
a)



Multiplication fact:

Area = _____ cm²

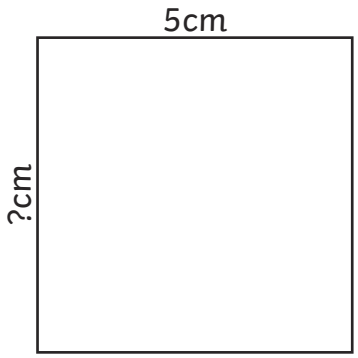
b)



Multiplication fact:

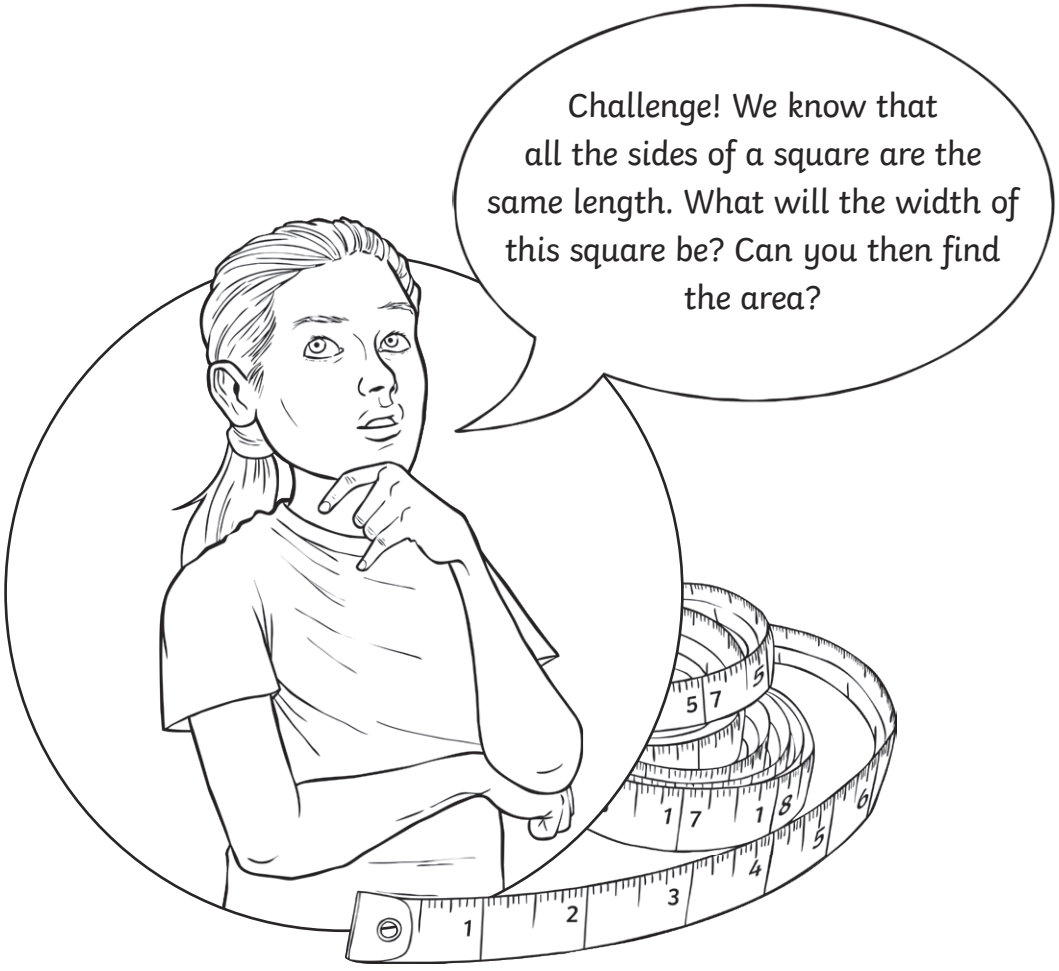
Area = _____ cm²

c)



Multiplication fact:

Area = _____ cm²



Calculating Area **Answers**

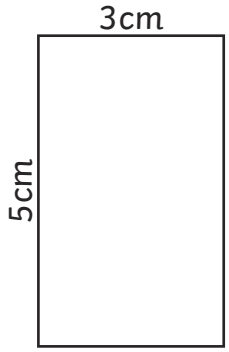
Question	Answer			
1.	Fill in the answers to the 4 times table. This will help you in the next question.			
	1 × 4 = **4**	4 × 4 = **16**	7 × 4 = **28**	10 × 4 = **40**
	2 × 4 = **8**	5 × 4 = **20**	8 × 4 = **32**	11 × 4 = **44**
	3 × 4 = **12**	6 × 4 = **24**	9 × 4 = **36**	12 × 4 = **48**
2.	Calculate the area of these shapes in cm² and write a multiplication fact to show how you found the area. You can use the 4 times table that you completed in the first question to help.			
a	Multiplication fact: **4 × 2 = 8 or 2 × 4 = 8** Area = **8**cm²			
b	Multiplication fact: **3 × 4 = 12 or 4 × 3 = 12** Area = **12**cm²			
c	Multiplication fact: **12 × 4 = 48 or 4 × 12 = 48** Area = **48**cm²			
d	Multiplication fact: **7 × 4 = 28 or 4 × 7 = 28** Area = **28**cm²			
e	Multiplication fact: **8 × 4 = 32 or 4 × 8 = 32** Area = **32**cm²			
f	Multiplication fact: **4 × 4 = 16** Area = **16**cm²			
3.	Now use your knowledge of other times tables to calculate the areas of these shapes and write a multiplication fact to show how you found the area.			
a	Multiplication fact: **8 × 6 = 48 or 6 × 8 = 48** Area = **48**cm²			
b	Multiplication fact: **6 × 11 = 66 or 11 × 6 = 66** Area = **66**cm²			
c	Multiplication fact: **5 × 5 = 25** Area = **25**cm²			

Calculating Area

I can calculate the area of rectangles and squares.

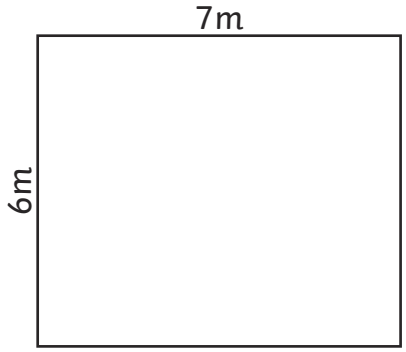
1) Calculate the area of these shapes and use cm^2 or m^2 to record your answer.
The shapes in these questions may not be drawn to scale.
Remember to look carefully at the units.

a)



Area = _____

b)

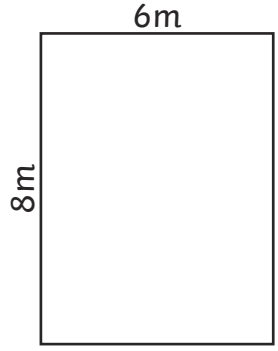


Area = _____

c)

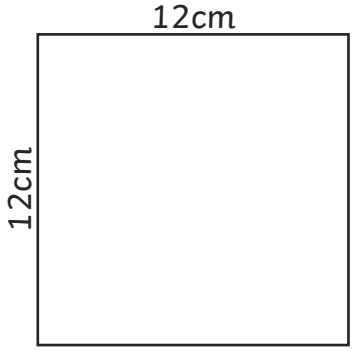
Area = _____

d)



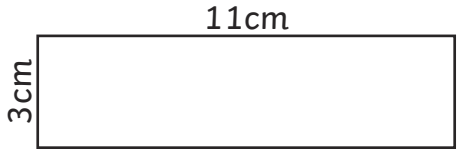
Area = _____

e)

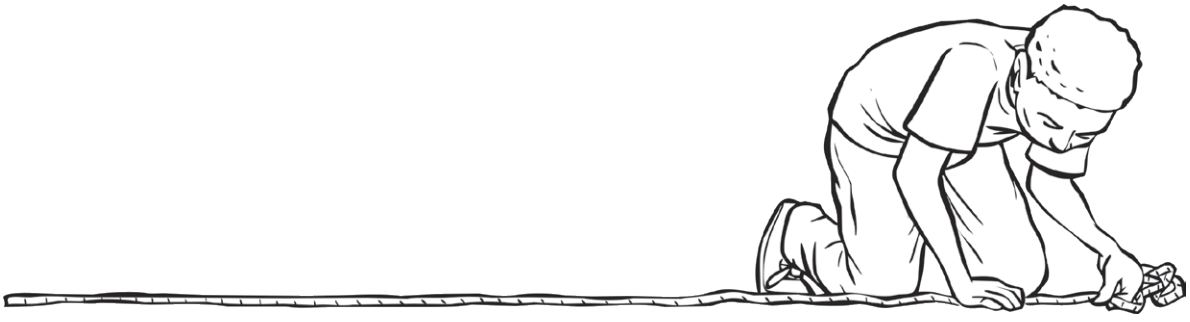


Area = _____

f)

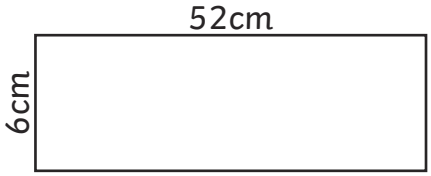


Area = _____



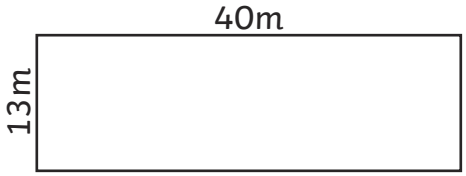
2) Now use your knowledge of multiplying larger numbers to calculate the area of these shapes and use cm^2 or m^2 to record your answer. Remember to look carefully at the units.

a)



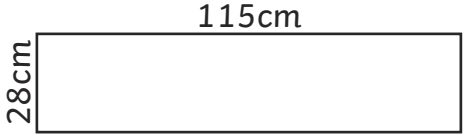
Area = _____

b)



Area = _____

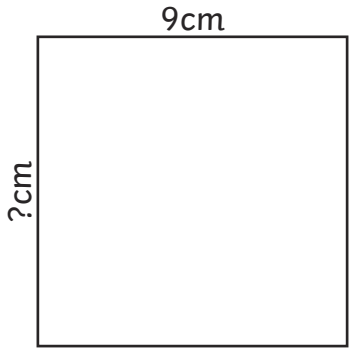
c)



Area = _____

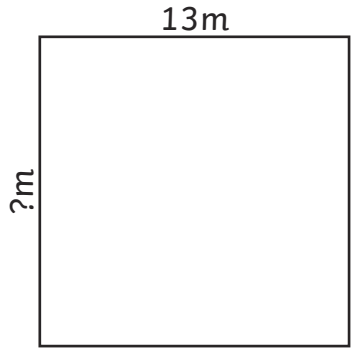
3) Can you find the missing measurements and use these to calculate the area?
Top tip: think about what you know about squares and rectangles.

a)



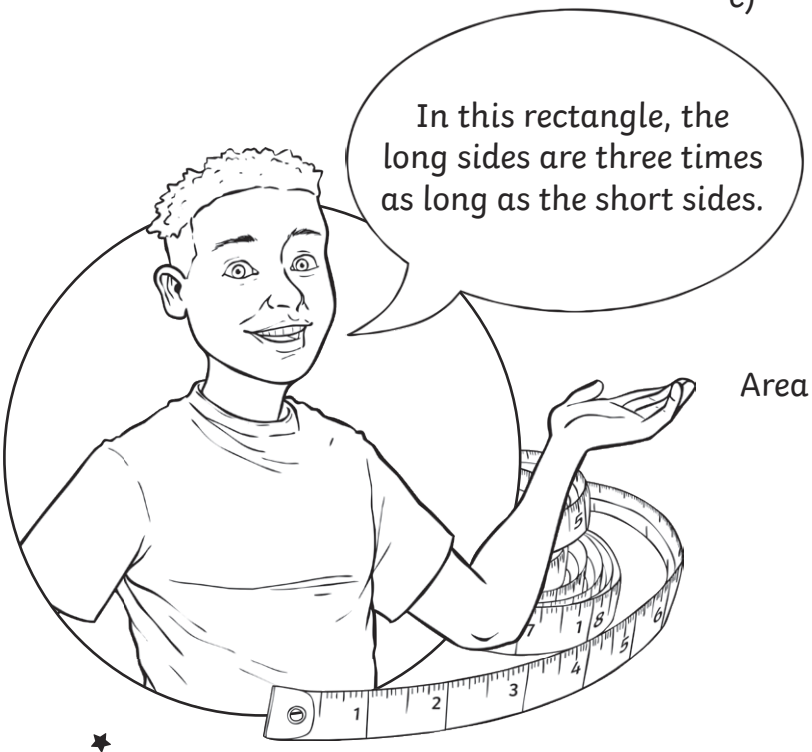
Area = _____

b)



Area = _____

c)



Area = _____

Calculating Area **Answers**

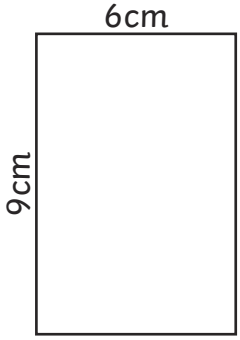
Question	Answer
1.	Calculate the area of these shapes and use cm² or m² to record your answer. Remember to look carefully at the units.
a	Area = 15cm²
b	Area = 42m²
c	Area = 18cm²
d	Area = 48m²
e	Area = 144cm²
f	Area = 33cm²
2.	Now use your knowledge of multiplying larger numbers to calculate the area of these shapes and use cm² or m² to record your answer. Remember to look carefully at the units.
a	Area = 312cm²
b	Area = 520cm²
c	Area = 3220cm²
3.	Can you find the missing measurements and use these to calculate the area? Top tip: think about what you know about squares and rectangles.
a	**Children should recognise that 9cm is the missing measurement.** Area = 81cm²
b	**Children should recognise that 13cm is the missing measurement.** Area = 169m²
c	**Children should recognise that 18cm is the missing measurement.** Area = 108cm²

Calculating Area

I can calculate the area of rectangles and squares.

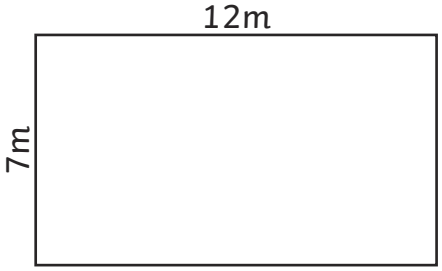
1) Calculate the area of these shapes and use cm² or m² to record your answer.
The shapes in these questions may not be drawn to scale.
Remember to look carefully at the units.

a)



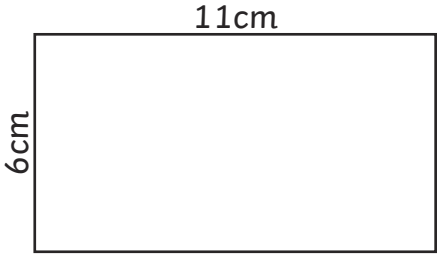
Area = _____

b)



Area = _____

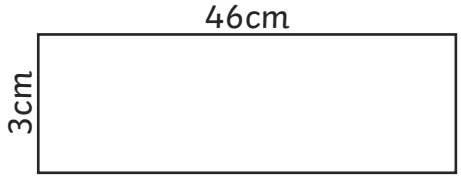
c)



Area = _____

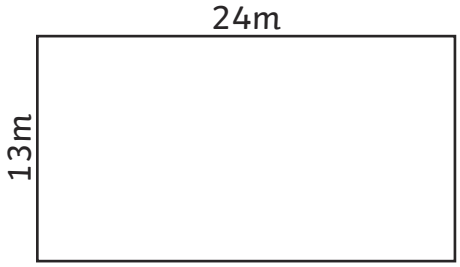
2) Now use your knowledge of multiplying larger numbers to calculate the area of these shapes and use cm² or m² to record your answer. Remember to look carefully at the units.

a)



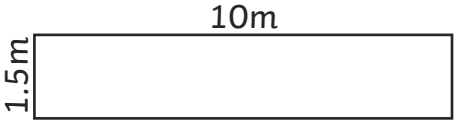
Area = _____

b)



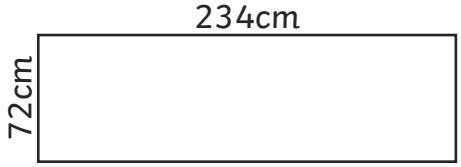
Area = _____

c)



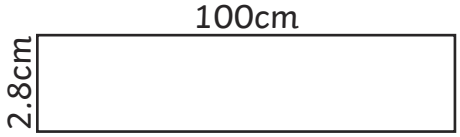
Area = _____

d)



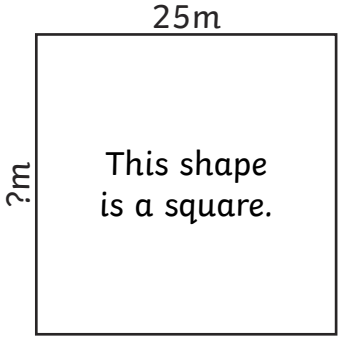
Area = _____

e)



Area = _____

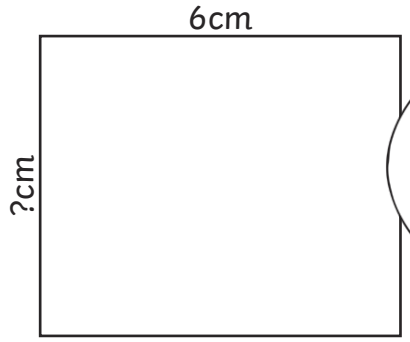
f)

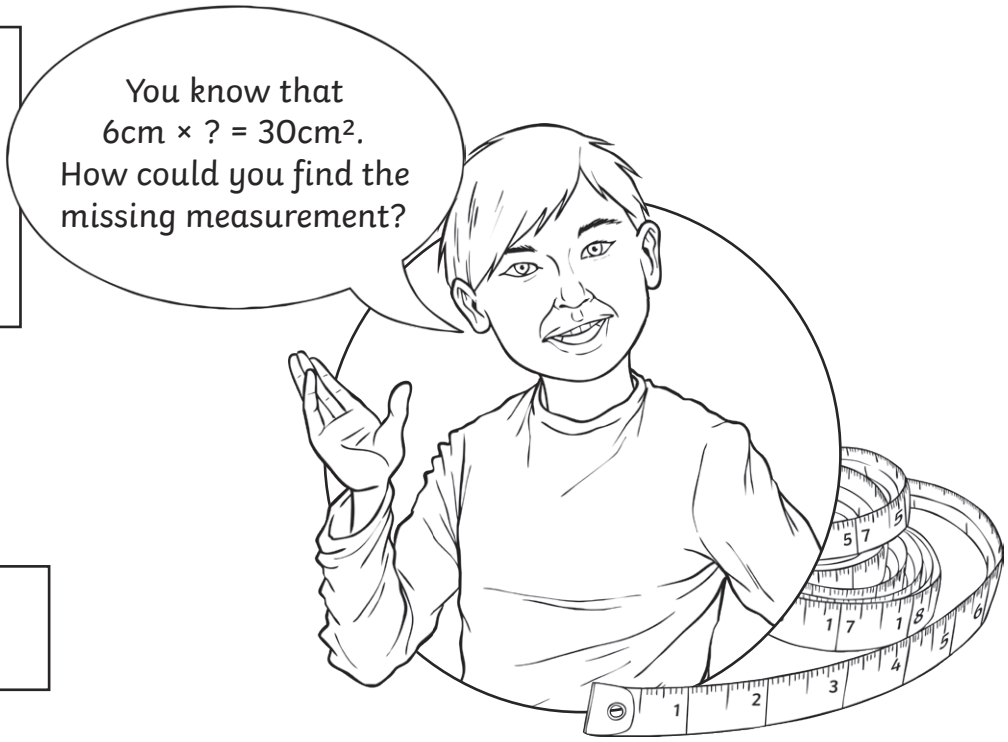


Area = _____

3) These three shapes all have an area of 30cm².
What are the measurements of the unlabelled sides? Show your working out.

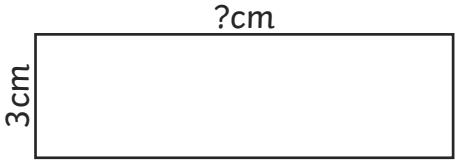
a)





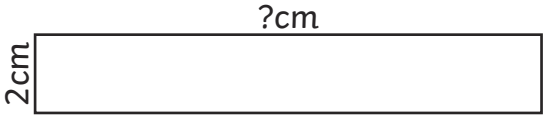
Area = _____

b)



Area = _____

c)



Area = _____

Calculating Area **Answers**

Question	Answer
1.	Calculate the area of these shapes and use cm² or m² to record your answer. Remember to look carefully at the units.
a	Area = **54cm²**
b	Area = **84m²**
c	Area = **66cm²**
2.	Now use your knowledge of multiplying larger numbers to calculate the area of these shapes and use cm² or m² to record your answer. Remember to look carefully at the units.
a	Area = **138cm²**
b	Area = **312cm²**
c	Area = **15m²**
d	Area = **16848cm²**
e	Area = **280cm²**
f	**Children should recognise that 25m is the missing measurement.** Area = **625cm²**
3.	These three shapes all have an area of 30cm². What are the measurements of the unlabelled sides?
	Children's working out for all questions should show understanding of the reciprocal relationship between multiplication and division - that you must divide the area by the given measurement to find the unlabelled measurement. Children may also use understanding of factor pairs to answer these questions.
a	**5cm**
b	**10cm**
c	**15cm**