Homework/Extension
Step 3: Area of a Triangle 1

National Curriculum Objectives:

Mathematics Year 6: (6M7b) Calculate the area of parallelograms and triangles

Differentiation:

Questions 1, 4 and 7 (Varied Fluency)
Developing Tick the triangle that has a different area from the others. Squares measure 1cm² and part squares are always worth a half.
Expected Tick the triangle that has a different area from the others. Squares measure 1cm².
Greater Depth Tick the triangle that has a different area from the others. Squares measure 2cm² or 3cm².

Questions 2, 5 and 8 (Varied Fluency)
Developing Draw two triangles with the same area as the given example. Squares measure 1cm² and part squares are always worth a half.
Expected Draw two triangles with the same estimated area as the given example. Squares measure 1cm².
Greater Depth Draw two triangles with the same estimated area as the given example. Squares measure 2cm² or 3cm².

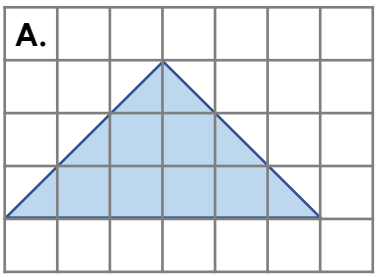
Questions 3, 6 and 9 (Reasoning and Problem Solving)
Developing Draw a right-angled triangle to help support an explanation to a given statement. Squares measure 1cm² and part squares are always worth a half.
Expected Draw a right-angled triangle to help support an explanation to a given statement. Squares measure 1cm².
Greater Depth Draw three triangles to help support an explanation to a given statement. Squares measure 2cm² or 3cm².

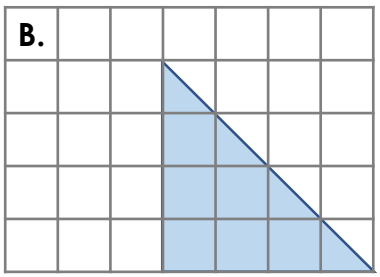
More Year 6 Perimeter, Area and Volume resources.

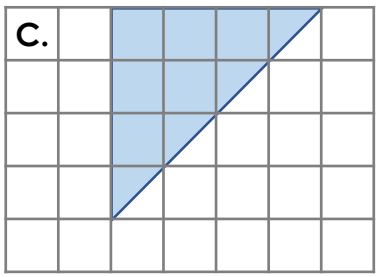
Did you like this resource? Don't forget to review it on our website.

Area of a Triangle 1

1. Counting the squares to help you, tick the triangle below which has a different area from the others.



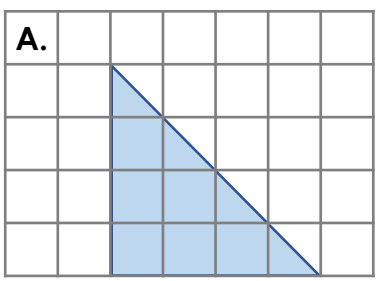


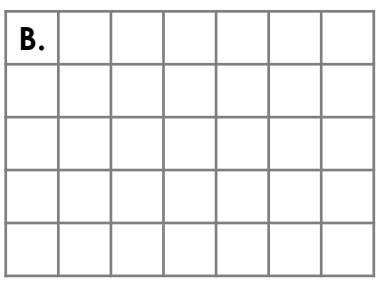


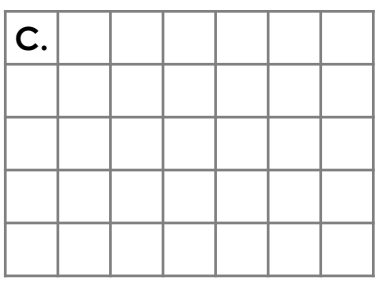
D

VF
HW/Ext

2. Count the squares to find the area of triangle A. Draw two different triangles with the same area.







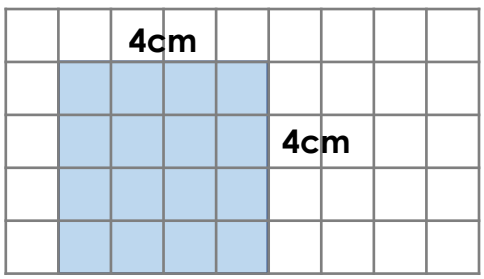
D

Not to scale

VF
HW/Ext

3. Teesha says,

If I were to make a right-angled triangle with half the area of this square, the area would have seven squares, which would equal 7cm².



Using a drawing of a triangle to support your answer, explain whether Teesha is correct.

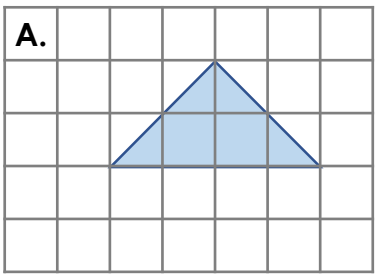
D

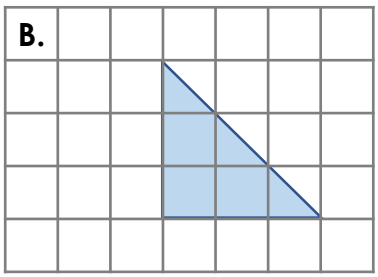
Not to scale

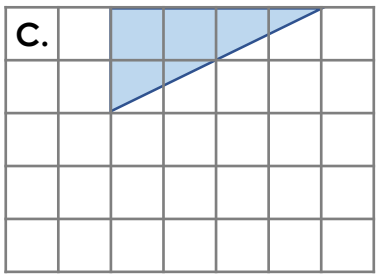
RPS
HW/Ext

Area of a Triangle 1

4. Counting the squares to help you, tick the triangle below which has a different area from the others.



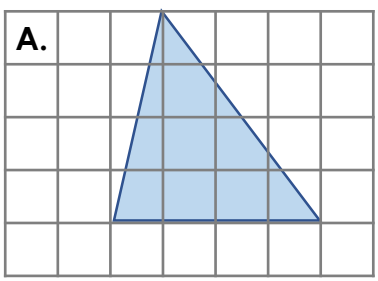


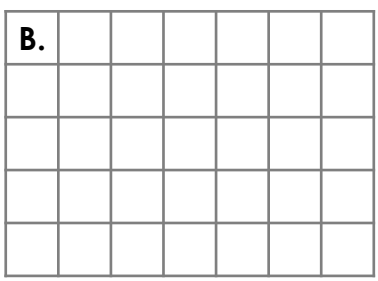


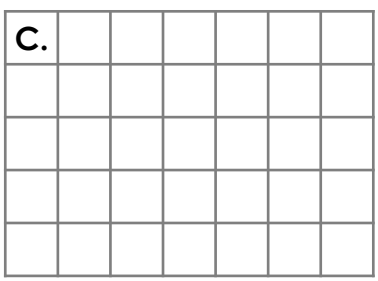
E

VF
HW/Ext

5. Count the squares to find the area of triangle A. Draw two different triangles with the same area.







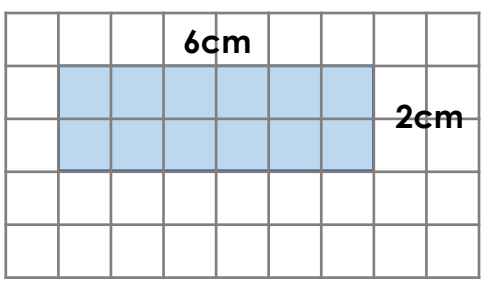
E

Not to scale

VF
HW/Ext

6. Jonah says,

If I were to make a right-angled triangle with half the area of this rectangle, the area would have six squares, so would be 6cm^2.



Using a drawing of a triangle to support your answer, explain whether Jonah is correct.

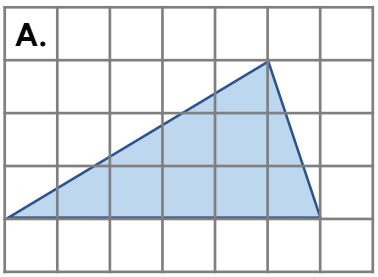
E

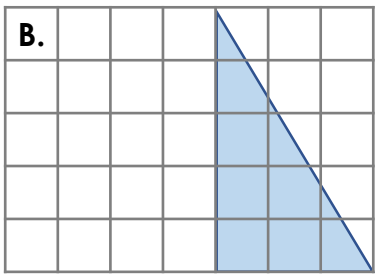
Not to scale

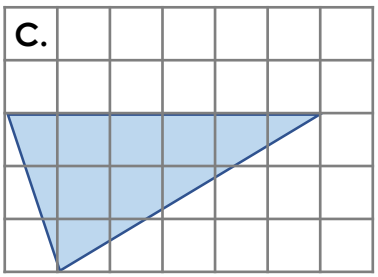
RPS
HW/Ext

Area of a Triangle 1

7. Counting the squares to help you, tick the triangle below which has a different area from the others.



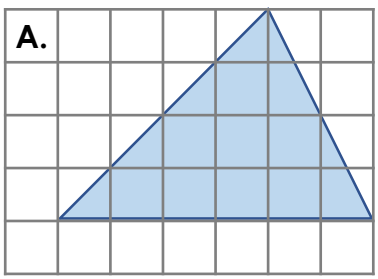


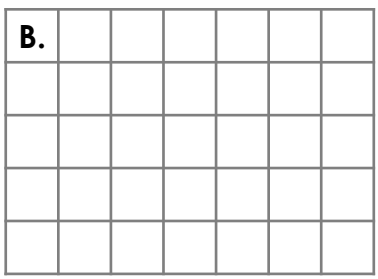


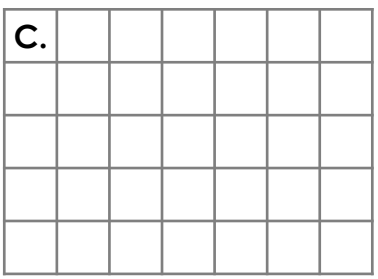
GD

VF
HW/Ext

8. Each square below is equal to 2cm². Count the squares to find the area of triangle A. Draw two different triangles with the same area.







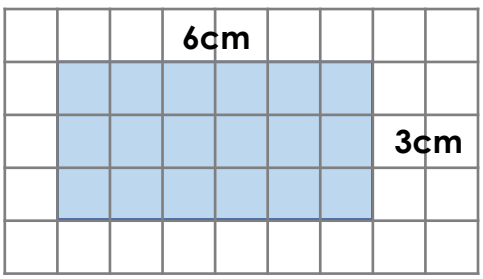
GD

Not to scale

VF
HW/Ext

9. Arnold says,

I am able to make a triangle within the area of this rectangle which has an area of 7cm².



Arnold is correct. Draw 3 different triangles that can be created to help Arnold prove his statement.

GD

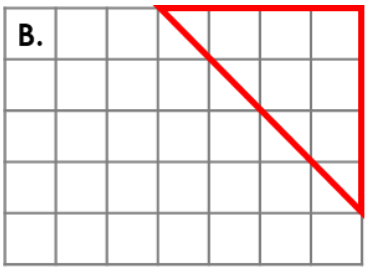
Not to scale

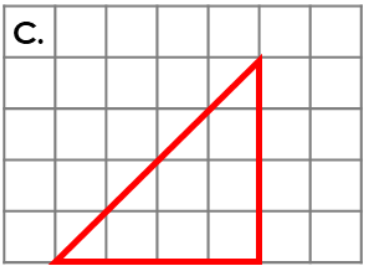
RPS
HW/Ext

Homework/Extension
Area of a Triangle 1

Developing

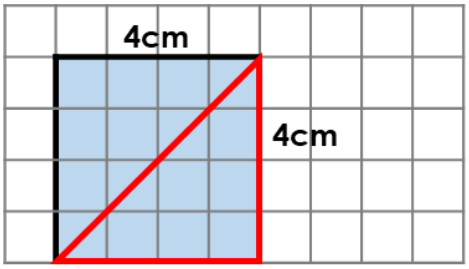
1. A
2. $8cm^2$. Various answers, for example:





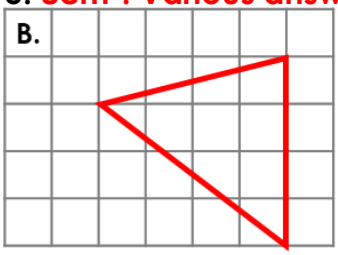
3. Various answers, for example:

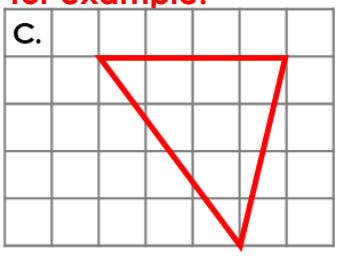
Teesha is incorrect. If half the area of the square is used to create a right-angled triangle, then the area of the triangle would be $8cm^2$, not $7cm^2$ as shown below.



Expected

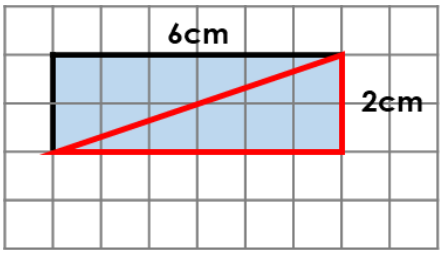
4. B
5. $8cm^2$. Various answers, for example:





6. Various answers, for example:

Jonah is correct. If half the area of the rectangle is used to create a right-angled triangle, then the area of that triangle would be $6cm^2$, as shown below.

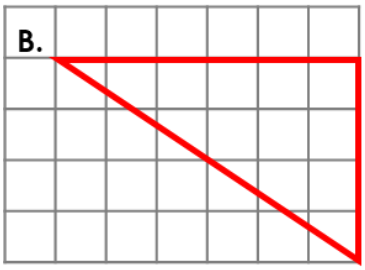


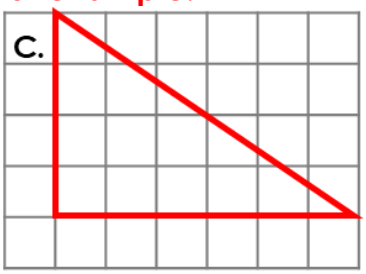
Homework/Extension
Area of a Triangle 1

Greater Depth

7. B

8. 24cm^2. Various answers, for example:





9. Various answers, for example: