

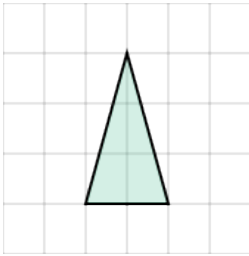
# Area of Triangles

October 15, 2013

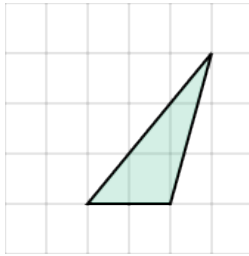
## 1 x1793ca122616912c

\*\*Which triangle has the larger area?\*\*

Triangle 1:



Triangle 2:



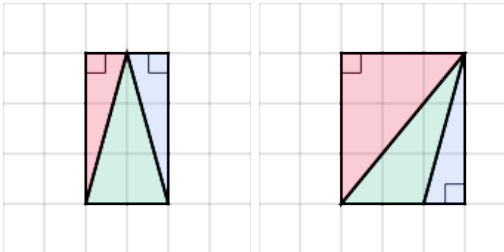
**Ans** Triangle 1

Triangle 2

They have the same area.

Not enough information

**Hint 1** We can enclose each of the triangles in a rectangle to help us calculate the areas.



**Hint 2** The area of an original triangle can be found by subtracting the areas of the additional right triangles from the area of the enclosing rectangle.

**Hint 3** For Triangle 1, the enclosing rectangle has an area of  $2 \times 3 = 6$ , and the areas of the two additional right triangles are:

$$\frac{1 \cdot 3}{2} = 1.5$$

$$\frac{1 \cdot 3}{2} = 1.5$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$6 - 1.5 - 1.5 = 3$$

Triangle 1 has an area of 3 units<sup>2</sup>. What about Triangle 2?

**Hint 4** For Triangle 2, the enclosing rectangle has an area of  $3 \times 3 = 9$ , and the areas of the two additional right triangles are:

$$\frac{1 \cdot 3}{2} = 1.5$$

$$\frac{3 \cdot 3}{2} = 4.5$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$9 - 1.5 - 4.5 = 3$$

Triangle 2 has an area of 3 units<sup>2</sup>.

**Hint 5** Triangle 1 and Triangle 2 have the same area.

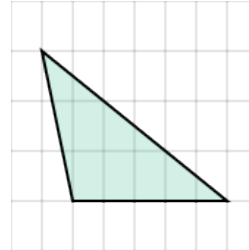
**Tags:** CC.6.G.A.1, Area of Triangle 1.1, SB.6.1.H.1.SR

**Version:** e107ed58.. 2013-10-15

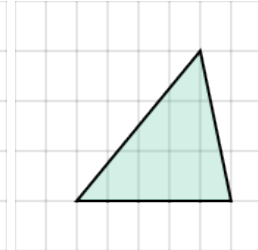
## 2 x3370ec68c3438ee8

\*\*Which triangle has the larger area?\*\*

Triangle 1:



Triangle 2:



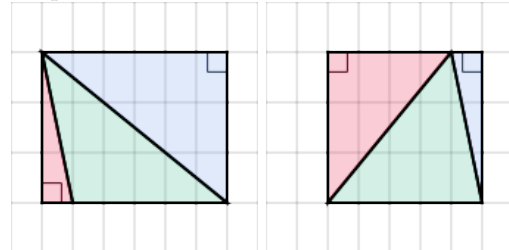
**Ans** Triangle 1

Triangle 2

They have the same area.

Not enough information

**Hint 1** We can enclose each of the triangles in a rectangle to help us calculate the areas.



**Hint 2** The area of an original triangle can be found by subtracting the areas of the additional right triangles from the area of the enclosing rectangle.

**Hint 3** For Triangle 1, the enclosing rectangle has an area of  $3 \times 6 = 18$ , and the areas of the two additional right triangles are:

$$\frac{3 \cdot 6}{2} = 9$$

$$\frac{1 \cdot 3}{2} = 1.5$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$18 - 9 - 1.5 = 7.5$$

Triangle 1 has an area of 7.5 units<sup>2</sup>. What about Triangle 2?

**Hint 4** For Triangle 2, the enclosing rectangle has an area of  $3 \times 5 = 15$ , and the areas of the two additional right triangles are:

$$\frac{1 \cdot 3}{2} = 1.5$$

$$\frac{3 \cdot 4}{2} = 6$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$15 - 1.5 - 6 = 7.5$$

Triangle 2 has an area of 7.5 units<sup>2</sup>.

**Hint 5** Triangle 1 and Triangle 2 have the same area.

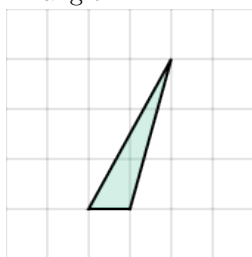
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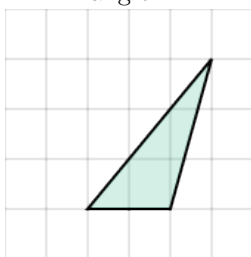
### 3 x3460395511aba88f

**\*\*Which triangle has the larger area?\***

Triangle 1:



Triangle 2:



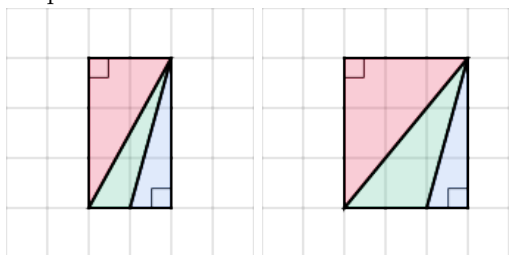
**Ans** Triangle 1

Triangle 2

They have the same area.

Not enough information

**Hint 1** We can enclose each of the triangles in a rectangle to help us calculate the areas.



**Hint 2** The area of an original triangle can be found by subtracting the areas of the additional right triangles from the area of the enclosing rectangle.

**Hint 3** For Triangle 1, the enclosing rectangle has an area of  $2 \times 3 = 6$ , and the areas of the two additional right triangles are:

$$\frac{1 \cdot 3}{2} = 1.5$$

$$\frac{2 \cdot 3}{2} = 3$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$6 - 1.5 - 3 = 1.5$$

Triangle 1 has an area of 1.5 units<sup>2</sup>. What about Triangle 2?

**Hint 4** For Triangle 2, the enclosing rectangle has an area of  $3 \times 3 = 9$ , and the areas of the two additional right triangles are:

$$\frac{1 \cdot 3}{2} = 1.5$$

$$\frac{3 \cdot 3}{2} = 4.5$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$9 - 1.5 - 4.5 = 3$$

Triangle 2 has an area of 3 units<sup>2</sup>.

**Hint 5** Triangle 2 has the larger area.

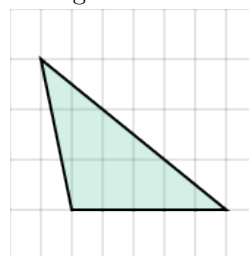
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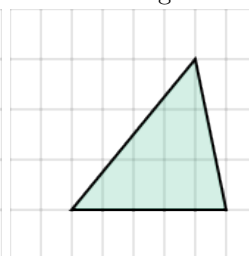
### 4 x4964c4a44ebbeaa5

**\*\*Which triangle has the larger area?\***

Triangle 1:



Triangle 2:



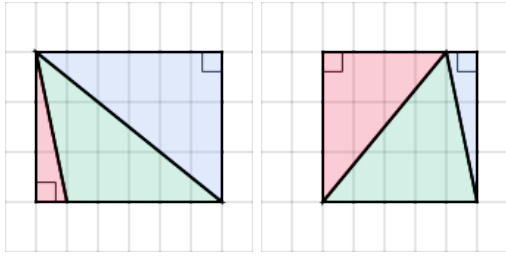
**Ans** Triangle 1

Triangle 2

They have the same area.

Not enough information

**Hint 1** We can enclose each of the triangles in a rectangle to help us calculate the areas.



**Hint 2** The area of an original triangle can be found by subtracting the areas of the additional right triangles from the area of the enclosing rectangle.

**Hint 3** For Triangle 1, the enclosing rectangle has an area of  $3 \times 6 = 18$ , and the areas of the two additional right triangles are:

$$\frac{3 \cdot 6}{2} = 9$$

$$\frac{1 \cdot 3}{2} = 1.5$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$18 - 9 - 1.5 = 7.5$$

Triangle 1 has an area of 7.5 units<sup>2</sup>. What about Triangle 2?

**Hint 4** For Triangle 2, the enclosing rectangle has an area of  $3 \times 5 = 15$ , and the areas of the two additional right triangles are:

$$\frac{1 \cdot 3}{2} = 1.5$$

$$\frac{3 \cdot 4}{2} = 6$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$15 - 1.5 - 6 = 7.5$$

Triangle 2 has an area of 7.5 units<sup>2</sup>.

**Hint 5** Triangle 1 and Triangle 2 have the same area.

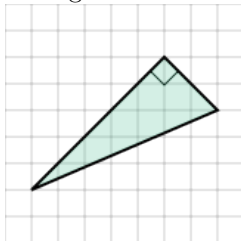
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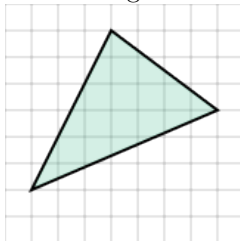
## 5 x545fee0c9a9ced8e

**\*\*Which triangle has the larger area?\***

Triangle 1:



Triangle 2:



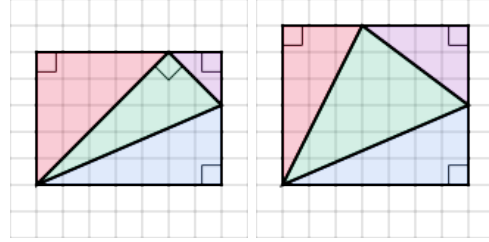
**Ans** Triangle 1

Triangle 2

They have the same area.

Not enough information

**Hint 1** We can enclose each of the triangles in a rectangle to help us calculate the areas.



**Hint 2** The area of an original triangle can be found by subtracting the areas of the additional right triangles from the area of the enclosing rectangle.

**Hint 3** For Triangle 1, the enclosing rectangle has an area of  $5 \times 7 = 35$ , and the areas of the three additional right triangles are:

$$\frac{2 \cdot 2}{2} = 2$$

$$\frac{3 \cdot 7}{2} = 10.5$$

$$\frac{5 \cdot 5}{2} = 12.5$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$35 - 2 - 10.5 - 12.5 = 10$$

Triangle 1 has an area of 10 units<sup>2</sup>. What about Triangle 2?

**Hint 4** For Triangle 2, the enclosing rectangle has an area of  $6 \times 7 = 42$ , and the areas of the three right triangles are:

$$\frac{3 \cdot 4}{2} = 6$$

$$\frac{3 \cdot 7}{2} = 10.5$$

$$\frac{3 \cdot 6}{2} = 9$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$42 - 6 - 10.5 - 9 = 16.5$$

Triangle 2 has an area of 16.5 units<sup>2</sup>.

**Hint 5** Triangle 2 has a larger area.

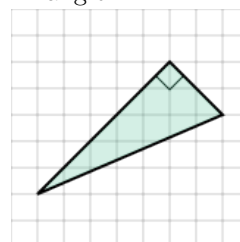
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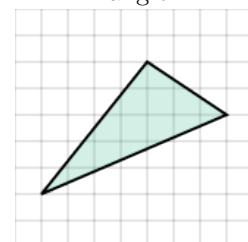
## 6 x7da40cef9abd818a

**\*\*Which triangle has the larger area?\***

Triangle 1:



Triangle 2:



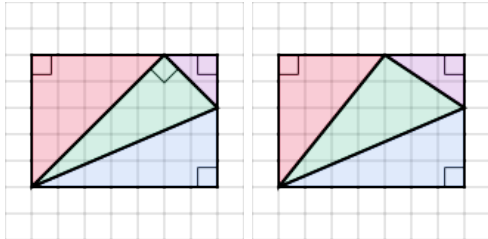
**Ans** Triangle 1

Triangle 2

They have the same area.

Not enough information

**Hint 1** We can enclose each of the triangles in a rectangle to help us calculate the areas.



**Hint 2** The area of an original triangle can be found by subtracting the areas of the additional right triangles from the area of the enclosing rectangle.

**Hint 3** For Triangle 1, the enclosing rectangle has an area of  $5 \times 7 = 35$ , and the areas of the three additional right triangles are:

$$\begin{aligned}\frac{2 \cdot 2}{2} &= 2 \\ \frac{3 \cdot 7}{2} &= 10.5 \\ \frac{5 \cdot 5}{2} &= 12.5\end{aligned}$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$35 - 2 - 10.5 - 12.5 = 10$$

Triangle 1 has an area of 10 units<sup>2</sup>. What about Triangle 2?

**Hint 4** For Triangle 2, the enclosing rectangle has an area of  $5 \times 7 = 35$ , and the areas of the three right triangles are:

$$\begin{aligned}\frac{2 \cdot 3}{2} &= 3 \\ \frac{3 \cdot 7}{2} &= 10.5 \\ \frac{4 \cdot 5}{2} &= 10\end{aligned}$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$35 - 3 - 10.5 - 10 = 11.5$$

Triangle 2 has an area of 11.5 units<sup>2</sup>.

**Hint 5** Triangle 2 has a larger area.

**Tags:** CC.6.G.A.1, Area of Triangle 1.1, SB.6.1.H.1.SR

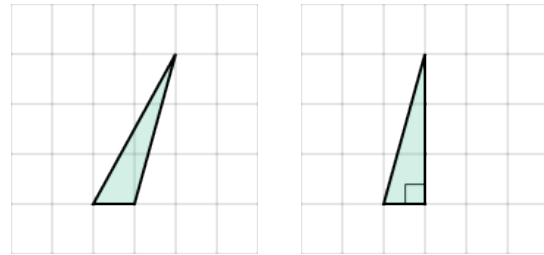
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## 7 xb0caf8e9a6dec91f

**\*\*Which triangle has the larger area?\***

Triangle 1:

Triangle 2:



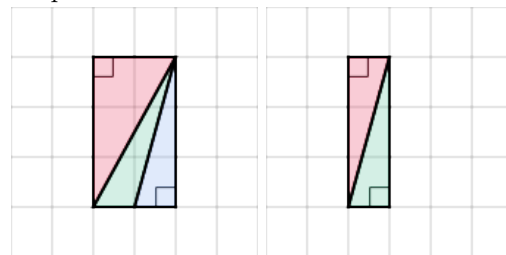
**Ans** Triangle 1

Triangle 2

They have the same area.

Not enough information

**Hint 1** We can enclose each of the triangles in a rectangle to help us calculate the areas.



**Hint 2** The area of an original triangle can be found by subtracting the areas of the additional right triangles from the area of the enclosing rectangle.

**Hint 3** For Triangle 1, the enclosing rectangle has an area of  $2 \times 3 = 6$ , and the areas of the two additional right triangles are:

$$\begin{aligned}\frac{1 \cdot 3}{2} &= 1.5 \\ \frac{2 \cdot 3}{2} &= 3\end{aligned}$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$6 - 1.5 - 3 = 1.5$$

Triangle 1 has an area of 1.5 units<sup>2</sup>. What about Triangle 2?

**Hint 4** For Triangle 2, the enclosing rectangle has an area of  $3 \times 1 = 3$ , and the area of the right triangle is:

$$\frac{1 \cdot 3}{2} = 1.5$$

Now we can subtract the areas of the additional triangle from the area of the rectangle.

$$3 - 1.5 = 1.5$$

Triangle 2 has an area of 1.5 units<sup>2</sup>.

**Hint 5** Triangle 1 and Triangle 2 have the same area.

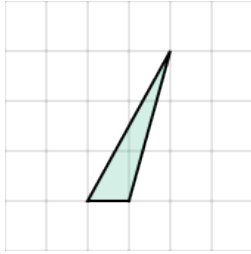
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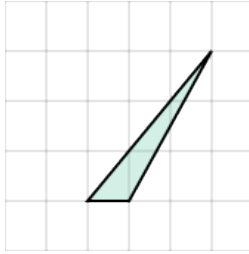
## 8 xb6b2062e3175da4d

**\*\*Which triangle has the larger area?\***

Triangle 1:



Triangle 2:



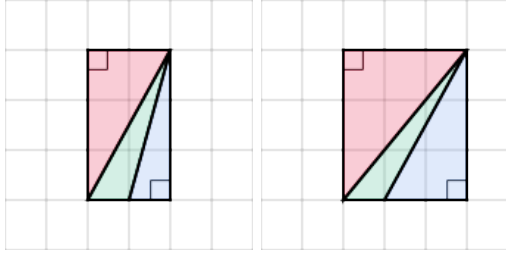
**Ans** Triangle 1

Triangle 2

They have the same area.

Not enough information

**Hint 1** We can enclose each of the triangles in a rectangle to help us calculate the areas.



**Hint 2** The area of an original triangle can be found by subtracting the areas of the additional right triangles from the area of the enclosing rectangle.

**Hint 3** For Triangle 1, the enclosing rectangle has an area of  $2 \times 3 = 6$ , and the areas of the two additional right triangles are:

$$\frac{1 \cdot 3}{2} = 1.5$$

$$\frac{2 \cdot 3}{2} = 3$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$6 - 1.5 - 3 = 1.5$$

Triangle 1 has an area of 1.5 units<sup>2</sup>. What about Triangle 2?

**Hint 4** For Triangle 2, the enclosing rectangle has an area of  $3 \times 3 = 9$ , and the areas of the two additional right triangles are:

$$\frac{2 \cdot 3}{2} = 3$$

$$\frac{3 \cdot 3}{2} = 4.5$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$9 - 3 - 4.5 = 1.5$$

Triangle 2 has an area of 1.5 units<sup>2</sup>.

**Hint 5** Triangle 1 and Triangle 2 have the same area.

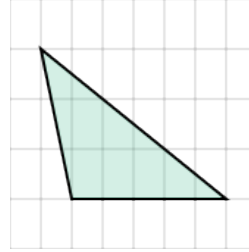
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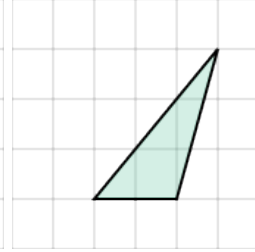
## 9 xc81137bfb1ce5ecb

**\*\*Which triangle has the larger area?\***

Triangle 1:



Triangle 2:



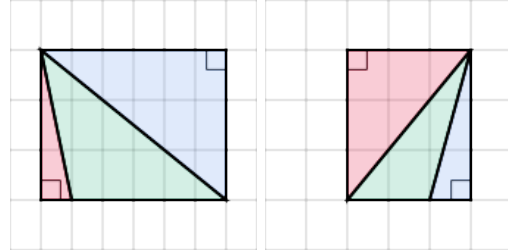
**Ans** Triangle 1

Triangle 2

They have the same area.

Not enough information

**Hint 1** We can enclose each of the triangles in a rectangle to help us calculate the areas.



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**Hint 3** For Triangle 1, the enclosing rectangle has an area of  $3 \times 6 = 18$ , and the areas of the two additional right triangles are:

$$\frac{3 \cdot 6}{2} = 9$$

$$\frac{1 \cdot 3}{2} = 1.5$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$18 - 9 - 1.5 = 7.5$$

Triangle 1 has an area of 7.5 units<sup>2</sup>. What about Triangle 2?

**Hint 4** For Triangle 2, the enclosing rectangle has an area of  $3 \times 3 = 9$ , and the areas of the two additional right triangles are:

$$\frac{1 \cdot 3}{2} = 1.5$$

$$\frac{3 \cdot 3}{2} = 4.5$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$9 - 1.5 - 4.5 = 3$$

Triangle 2 has an area of 3 units<sup>2</sup>.

**Hint 5** Triangle 1 has the larger area.

**Tags:** CC.6.G.A.1, Area of Triangle 1.1, SB.6.1.H.1.SR

**Version:** c2178db8.. 2013-10-15

## 10 xe6b2fe97c9c92959

**\*\*Which triangle has the larger area?\***

Triangle 1:



Triangle 2:



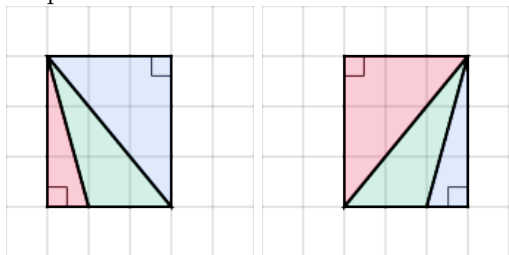
**Ans** Triangle 1

Triangle 2

They have the same area.

Not enough information

**Hint 1** We can enclose each of the triangles in a rectangle to help us calculate the areas.



**Hint 2** The area of an original triangle can be found by subtracting the areas of the additional right triangles from the area of the enclosing rectangle.

**Hint 3** For Triangle 1, the enclosing rectangle has an area of  $3 \times 3 = 9$ , and the areas of the two additional right triangles are:

$$\frac{3 \cdot 3}{2} = 4.5$$

$$\frac{1 \cdot 3}{2} = 1.5$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$9 - 4.5 - 1.5 = 3$$

Triangle 1 has an area of 3 units<sup>2</sup>. What about Triangle 2?

**Hint 4** For Triangle 2, the enclosing rectangle has an area of  $3 \times 3 = 9$ , and the areas of the two additional right triangles are:

$$\frac{1 \cdot 3}{2} = 1.5$$

$$\frac{3 \cdot 3}{2} = 4.5$$

Now we can subtract the areas of the additional triangle from the area of the rectangle.

$$9 - 1.5 - 4.5 = 3$$

Triangle 2 has an area of 3 units<sup>2</sup>.

**Hint 5** Triangle 1 and Triangle 2 have the same area.

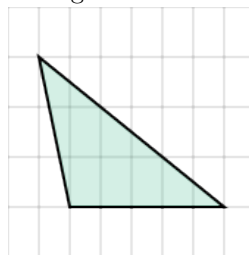
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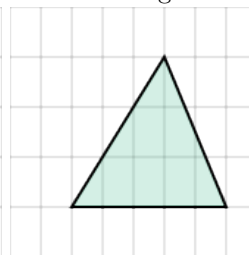
## 11 xfa691da601125822

**\*\*Which triangle has the larger area?\***

Triangle 1:



Triangle 2:



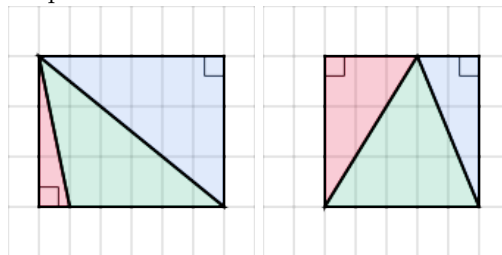
**Ans** Triangle 1

Triangle 2

They have the same area.

Not enough information

**Hint 1** We can enclose each of the triangles in a rectangle to help us calculate the areas.



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**Hint 3** For Triangle 1, the enclosing rectangle has an area of  $3 \times 6 = 18$ , and the areas of the two additional right triangles are:

$$\frac{3 \cdot 6}{2} = 9$$

$$\frac{1 \cdot 3}{2} = 1.5$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

$$18 - 9 - 1.5 = 7.5$$

Triangle 1 has an area of 7.5 units<sup>2</sup>. What about Triangle 2?

**Hint 4** For Triangle 2, the enclosing rectangle has an area of  $3 \times 5 = 15$ , and the areas of the two additional right triangles are:

$$\frac{2 \cdot 3}{2} = 3$$

$$\frac{3 \cdot 3}{2} = 4.5$$

Now we can subtract the areas of the additional triangles from the area of the rectangle.

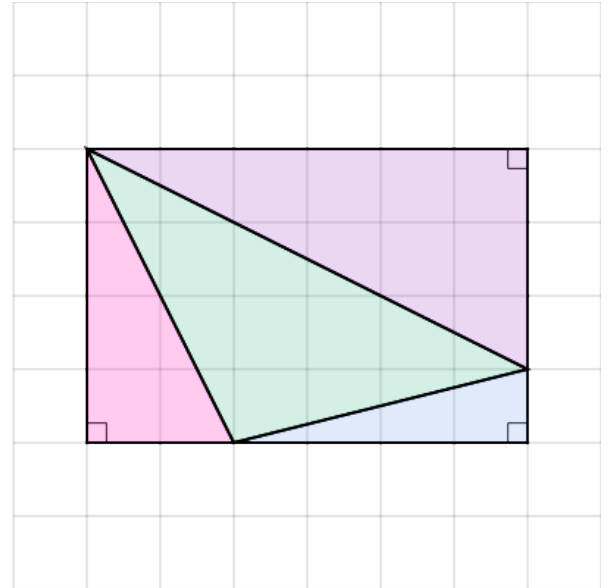
$$15 - 3 - 4.5 = 7.5$$

Triangle 2 has an area of 7.5 units<sup>2</sup>.

**Hint 5** Triangle 1 and Triangle 2 have the same area.

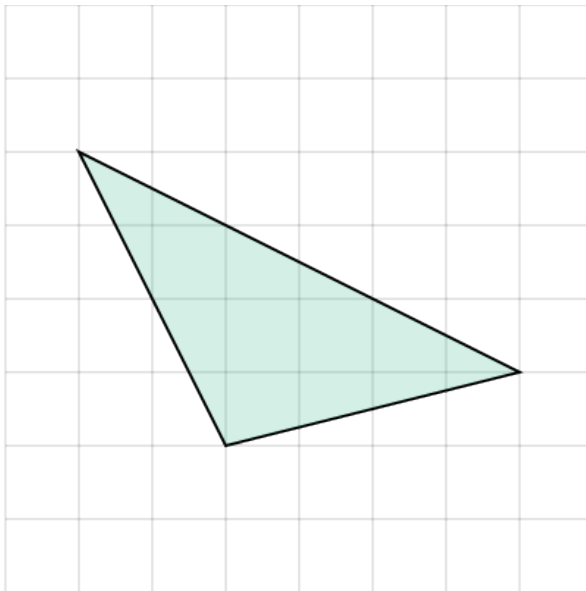
**Tags:** CC.6.G.A.1, Area of Triangle 1.1, SB.6.1.H.1.SR

**Version:** fc7c17b1.. 2013-10-15



## 12 x10ae6a535164e8ee

\*\*What is the area of the triangle below?\*\*



**Ans**  units<sup>2</sup> 9

**Hint 1** We can enclose this triangle in a rectangle with area  $6 \times 4 = 24$ .

**Hint 2** The areas of the three additional right triangles are:

$$\frac{3 \cdot 6}{2} = 9$$

$$\frac{1 \cdot 4}{2} = 2$$

$$\frac{2 \cdot 4}{2} = 4$$

**Hint 3** The area of the original triangle can be found by subtracting the area of the additional right triangles from the area of the rectangle.

$$24 - 9 - 2 - 4 = 9$$

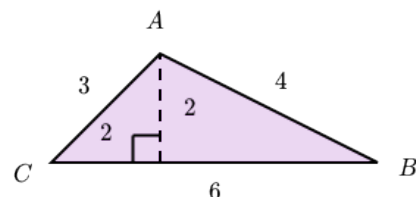
**Hint 4** The original triangle has an area of 9 units<sup>2</sup>.

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** acb63299.. 2013-10-15

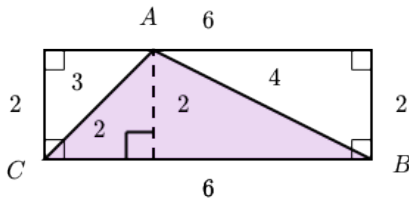
## 13 x39cafa2f0f4b797d

\*\*What is the area of Triangle *ABC* below?\*\* All sides lengths are measured in feet.

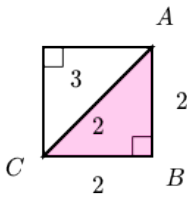


**Ans**  ft<sup>2</sup> 6

**Hint 1** The triangle is half of a rectangle that has a length of 6 feet and a width of 2 feet.

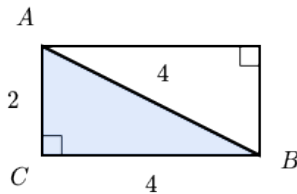


**Hint 2** It's a little easier to see that the triangle is half of the rectangle if we split the original triangle into two right triangles.



**Hint 3**

This right triangle is half of a square with area  $2 \times 2 = 4$   $\text{ft}^2$ , so this right triangle has an area of 2  $\text{ft}^2$ .



**Hint 4**

The other right triangle is half of a rectangle with area  $4 \times 2 = 8$   $\text{ft}^2$ , so the other right triangle also has an area of 4  $\text{ft}^2$ .

**Hint 5** Adding the two pieces together, we see that the area is  $2 + 4 = 6$   $\text{ft}^2$ .

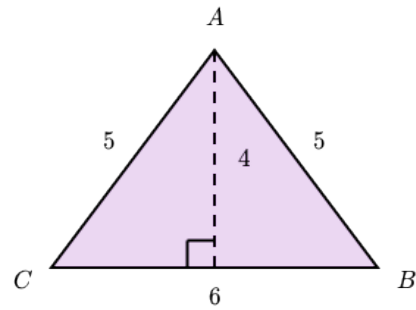
**Hint 6** The triangle has an area of 6  $\text{ft}^2$ .

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** 5a1febb0.. 2013-10-13

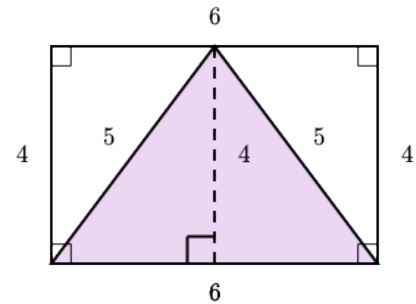
14 x43322953ff4acf5b

**\*\*What is the area of Triangle ABC below?\*\*** All sides lengths are measured in feet.

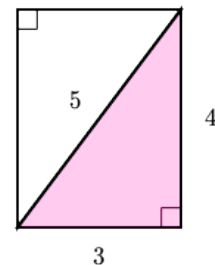


**Ans**   $\text{ft}^2$  12

**Hint 1** The triangle is half of a rectangle that has a length of 6 feet and a width of 4 feet.

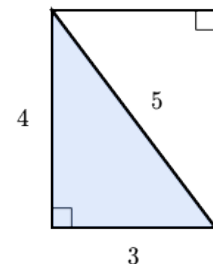


**Hint 2** It's a little easier to see that the triangle is half of the rectangle if we split the original triangle into two right triangles.



**Hint 3**

This right triangle is half of a rectangle with area  $4 \times 3 = 12$   $\text{ft}^2$ , so this right triangle has an area of 6  $\text{ft}^2$ .



**Hint 4**

The other right triangle is also half of a rectangle with  $4 \times 3 = 12$   $\text{ft}^2$ , so the other right triangle also has an area of 6  $\text{ft}^2$ .



**Hint 5** Adding the two pieces together, we see that the area is  $6 + 6 = 12 \text{ ft}^2$ .

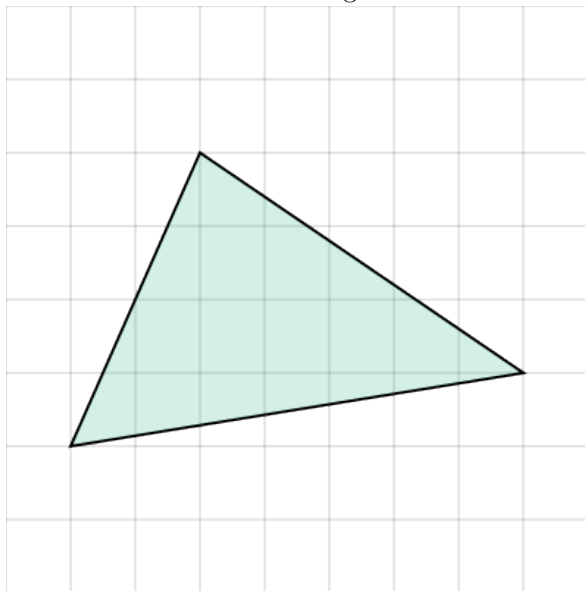
**Hint 6** The triangle has an area of  $12 \text{ ft}^2$ .

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** 069a19cf.. 2013-10-11

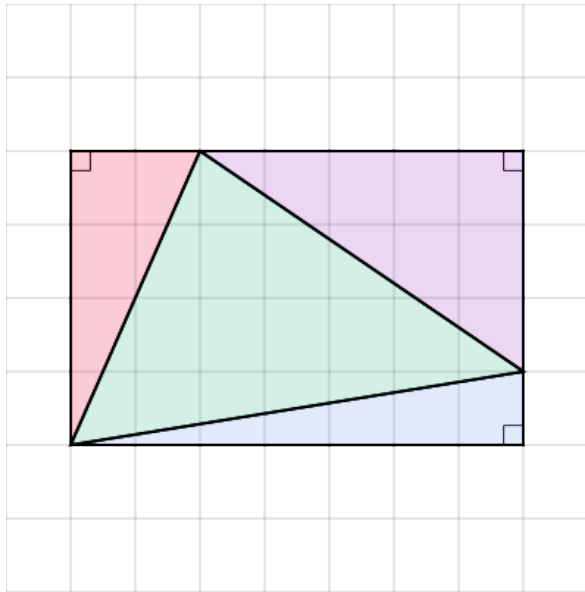
## 15 x599468861ee68b78

**\*\*What is the area of the triangle below?\*\***



**Ans**  units<sup>2</sup> 13

**Hint 1** We can enclose this triangle in a rectangle with area  $7 \times 4 = 28$ .



**Hint 2** The areas of the three additional right triangles are:

$$\frac{3 \cdot 5}{2} = 7.5$$

$$\frac{1 \cdot 7}{2} = 3.5$$

$$\frac{2 \cdot 4}{2} = 4$$

**Hint 3** The area of the original triangle can be found by subtracting the area of the additional right triangles from the area of the rectangle.

$$28 - 7.5 - 3.5 - 4 = 13$$

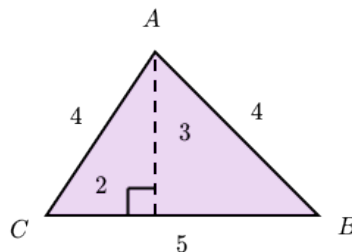
**Hint 4** The original triangle has an area of  $13 \text{ units}^2$ .

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** c3e4c245.. 2013-10-15

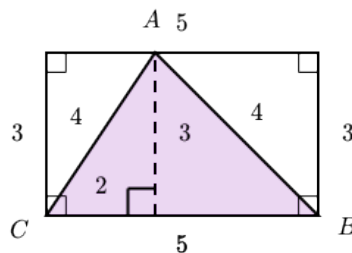
## 16 x64ba6e1bf7bb9781

**\*\*What is the area of Triangle ABC below?\*\*** All sides lengths are measured in feet.

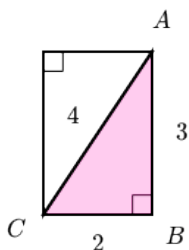


**Ans**  ft<sup>2</sup> 7.5

**Hint 1** The triangle is half of a rectangle that has a length of 5 feet and a width of 3 feet.

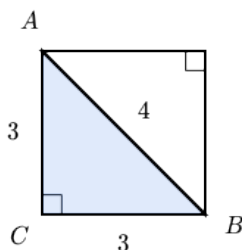


**Hint 2** It's a little easier to see that the triangle is half of the rectangle if we split the original triangle into two right triangles.



**Hint 3**

This right triangle is half of a rectangle with area  $3 \times 2 = 6 \text{ ft}^2$ , so this right triangle has an area of  $3 \text{ ft}^2$ .



**Hint 4**

The other right triangle is half of a square with area  $3 \times 3 = 9 \text{ ft}^2$ , so the other right triangle also has an area of  $4.5 \text{ ft}^2$ .

**Hint 5** Adding the two pieces together, we see that the area is  $3 + 4.5 = 7.5 \text{ ft}^2$ .

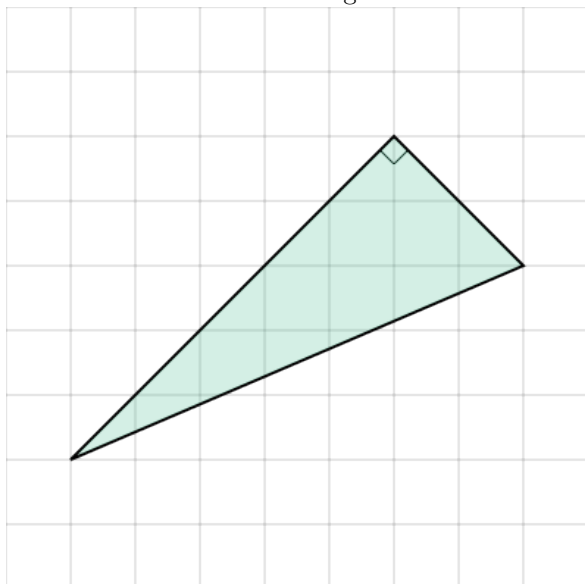
**Hint 6** The triangle has an area of  $7.5 \text{ ft}^2$ .

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** 3fa4bafa.. 2013-10-13

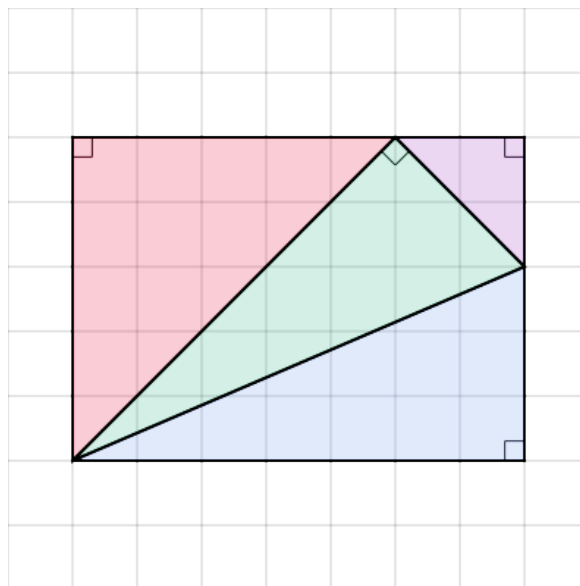
## 17 x7720fa616a7c50ad

**\*\*What is the area of the triangle below?\*\***



**Ans**  units<sup>2</sup> 10

**Hint 1** We can enclose this triangle in a rectangle with area  $7 \times 5 = 35$ .



**Hint 2** The areas of the three additional right triangles are:

$$\frac{2 \cdot 2}{2} = 2$$

$$\frac{3 \cdot 7}{2} = 10.5$$

$$\frac{5 \cdot 5}{2} = 12.5$$

**Hint 3** The area of the original triangle can be found by subtracting the area of the additional right triangles from the area of the rectangle.

$$35 - 2 - 10.5 - 12.5 = 10$$

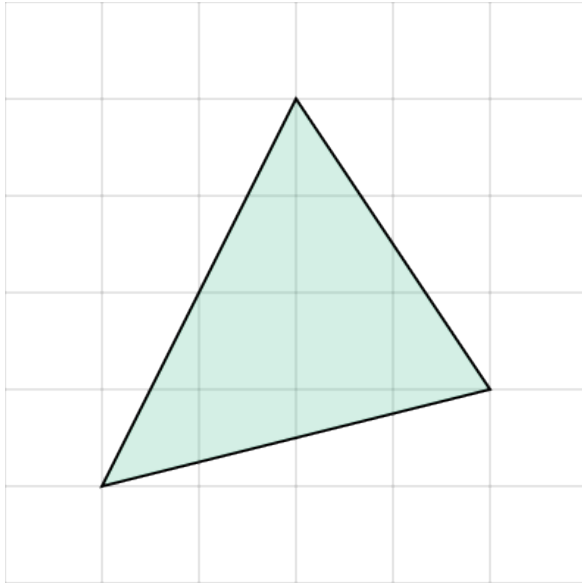
**Hint 4** The original triangle has an area of  $10 \text{ units}^2$ .

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** 5d81dce5.. 2013-10-14

## 18 x77adf2fae5d65eb7

**\*\*What is the area of the triangle below?\*\***



the area of the square.

$$16 - 3 - 2 - 4 = 7$$

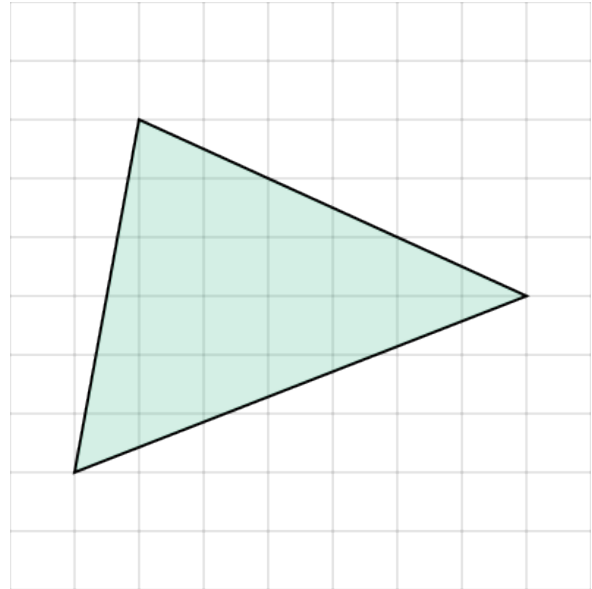
**Hint 4** The original triangle has an area of 7 units<sup>2</sup>.

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** 200a0956.. 2013-10-15

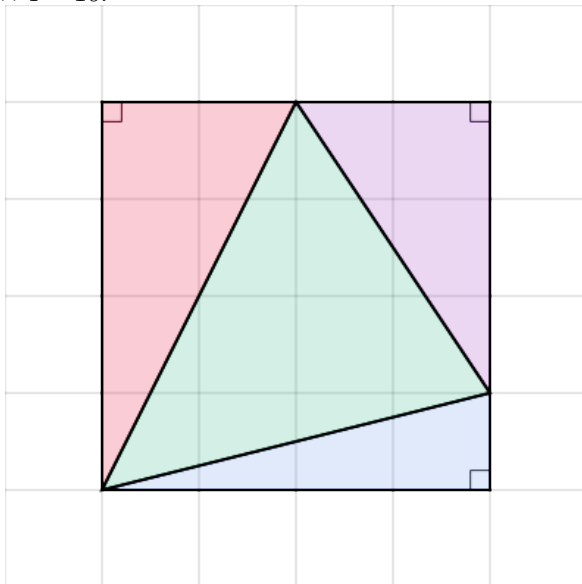
## 19 x98290a8f0805fe87

**\*\*What is the area of the triangle below?\*\***



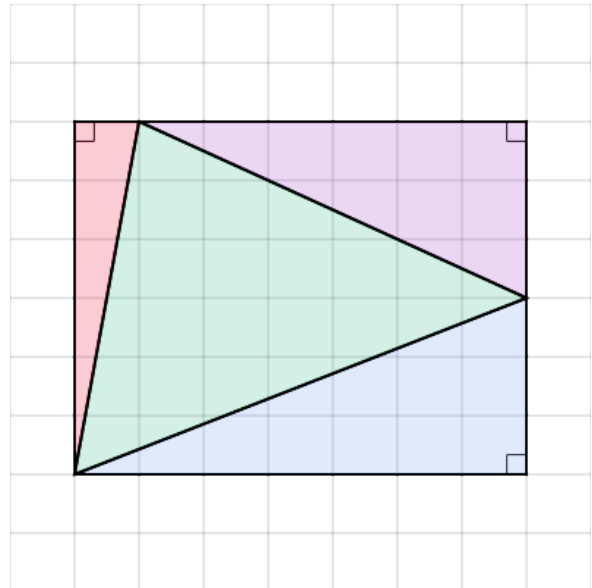
**Ans**  units<sup>2</sup> 7

**Hint 1** We can enclose this triangle in a square with area  $4 \times 4 = 16$ .



**Ans**  units<sup>2</sup> 19.5

**Hint 1** We can enclose this triangle in a rectangle with area  $7 \times 6 = 42$ .



**Hint 2** The areas of the three additional right triangles are:

$$\frac{2 \cdot 3}{2} = 3$$

$$\frac{1 \cdot 4}{2} = 2$$

$$\frac{2 \cdot 4}{2} = 4$$

**Hint 3** The area of the original triangle can be found by subtracting the area of the additional right triangles from

**Hint 2** The areas of the three additional right triangles are:

$$\frac{3 \cdot 6}{2} = 9$$

$$\frac{3 \cdot 7}{2} = 10.5$$

$$\frac{1 \cdot 6}{2} = 3$$

**Hint 3** The area of the original triangle can be found by subtracting the area of the additional right triangles from the area of the rectangle.

$$42 - 9 - 10.5 - 3 = 19.5$$

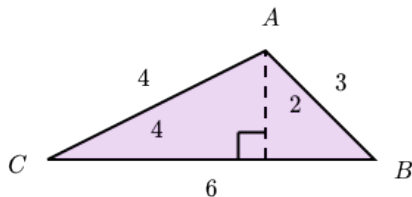
**Hint 4** The original triangle has an area of 19.5 units<sup>2</sup>.

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** 2461bfb6.. 2013-10-15

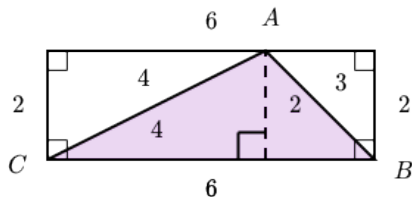
## 20 x9ecb73e3e695cec9

**\*\*What is the area of Triangle ABC below?\*\*** All sides lengths are measured in feet.

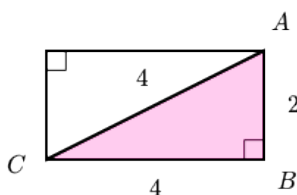


**Ans**  ft<sup>2</sup> 6

**Hint 1** The triangle is half of a rectangle that has a length of 6 feet and a width of 2 feet.

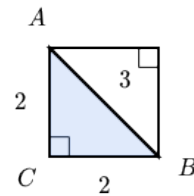


**Hint 2** It's a little easier to see that the triangle is half of the rectangle if we split the original triangle into two right triangles.



**Hint 3**

This right triangle is half of a rectangle with area  $4 \times 2 = 8$  ft<sup>2</sup>, so this right triangle has an area of 4 ft<sup>2</sup>.



**Hint 4**

The other right triangle is half of a square with area  $2 \times 2 = 4$  ft<sup>2</sup>, so the other right triangle also has an area of 2 ft<sup>2</sup>.

**Hint 5** Adding the two pieces together, we see that the area is  $4 + 2 = 6$  ft<sup>2</sup>.

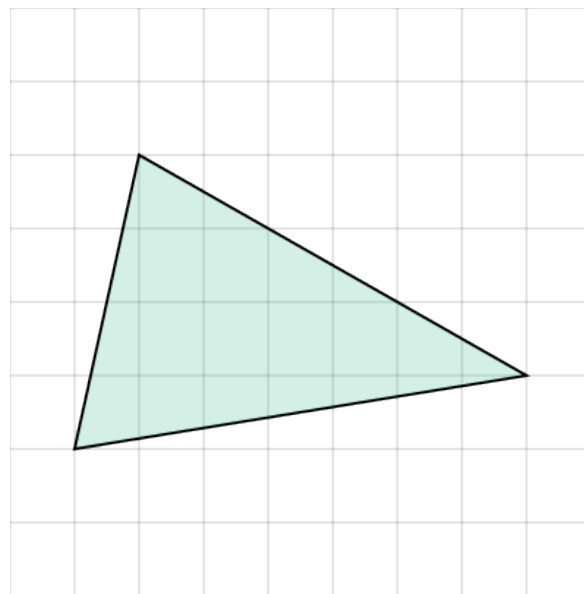
**Hint 6** The triangle has an area of 6 ft<sup>2</sup>.

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** c0cfb580.. 2013-10-13

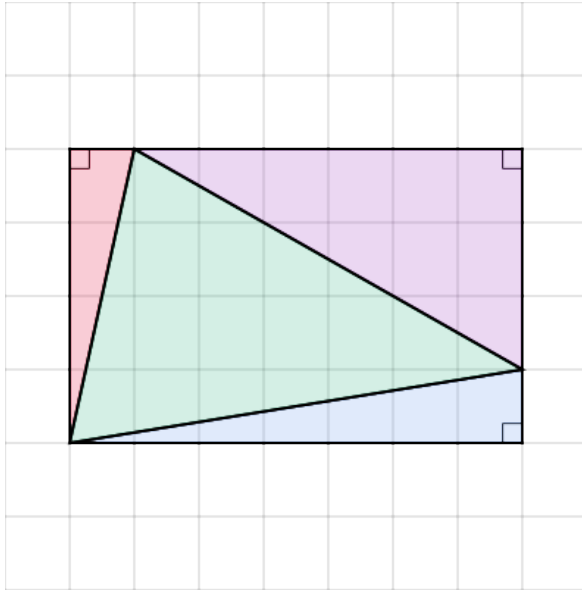
## 21 xa171035eb92f1d61

**\*\*What is the area of the triangle below?\*\***

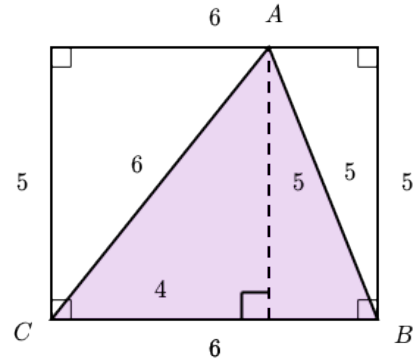


**Ans**  units<sup>2</sup> 13.5

**Hint 1** We can enclose this triangle in a rectangle with area  $7 \times 4 = 28$ .



**Hint 1** The triangle is half of a rectangle that has a length of 6 feet and a width of 5 feet.



**Hint 2** It's a little easier to see that the triangle is half of the rectangle if we split the original triangle into two right triangles.

**Hint 2** The areas of the three additional right triangles are:

$$\frac{3 \cdot 6}{2} = 9$$

$$\frac{1 \cdot 7}{2} = 3.5$$

$$\frac{1 \cdot 4}{2} = 2$$

**Hint 3** The area of the original triangle can be found by subtracting the area of the additional right triangles from the area of the rectangle.

$$28 - 9 - 3.5 - 2 = 13.5$$

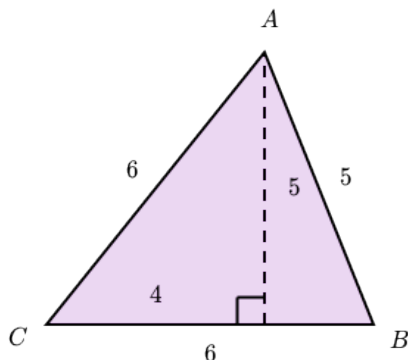
**Hint 4** The original triangle has an area of 13.5 units<sup>2</sup>.

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** 1a858c9b.. 2013-10-15

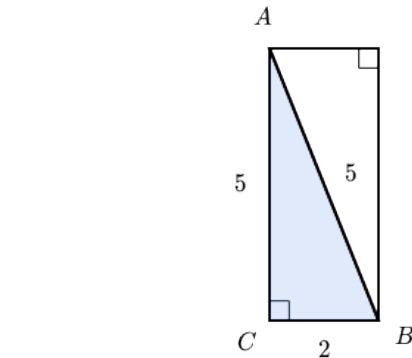
## 22 xaac6b55019ebdd1b

**\*\*What is the area of Triangle  $ABC$  below?\*\*** All sides lengths are measured in feet.



**Hint 3**

This right triangle is half of a rectangle with area  $5 \times 4 = 20$  ft<sup>2</sup>, so this right triangle has an area of 10 ft<sup>2</sup>.



**Hint 4**

The other right triangle is also half of a rectangle with area  $5 \times 2 = 10$  ft<sup>2</sup>, so the other right triangle also has an area of 5 ft<sup>2</sup>.

**Hint 5** Adding the two pieces together, we see that the area is  $10 + 5 = 15$  ft<sup>2</sup>.

**Hint 6** The triangle has an area of 15 ft<sup>2</sup>.

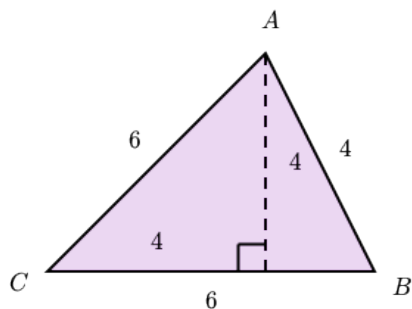
**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** b72d8127.. 2013-10-13

**Ans**  15

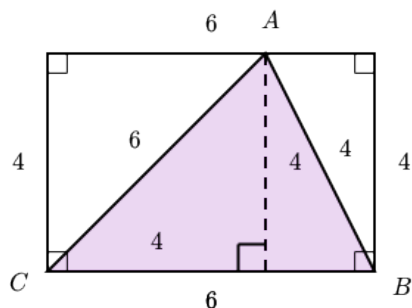
## 23 xad0626bc47031702

**\*\*What is the area of Triangle  $ABC$  below?\*\*** All sides lengths are measured in feet.

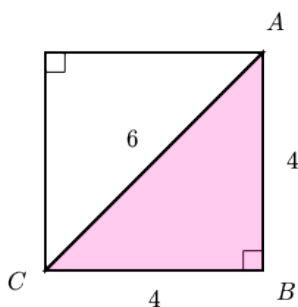


**Ans**  12 ft<sup>2</sup>

**Hint 1** The triangle is half of a rectangle that has a length of 6 feet and a width of 4 feet.

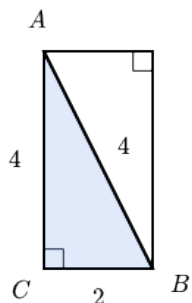


**Hint 2** It's a little easier to see that the triangle is half of the rectangle if we split the original triangle into two right triangles.



**Hint 3**

This right triangle is half of a square with area  $4 \times 4 = 16$  ft<sup>2</sup>, so this right triangle has an area of 8 ft<sup>2</sup>.



**Hint 4**

The other right triangle is half of a rectangle with area  $4 \times 2 = 8$  ft<sup>2</sup>, so the other right triangle also has an area of 4 ft<sup>2</sup>.

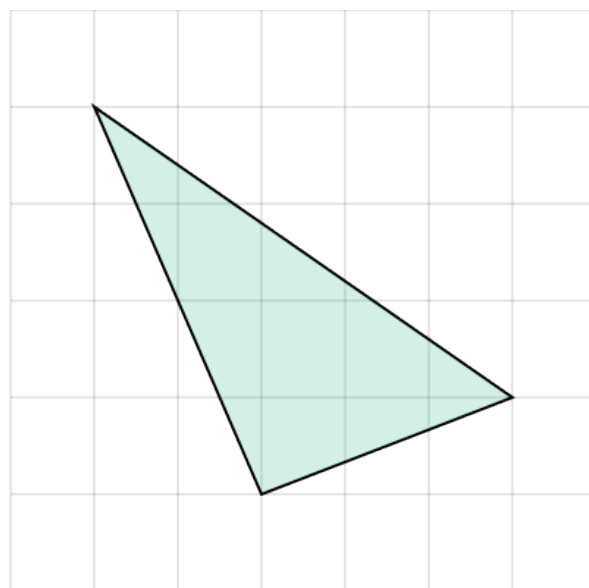
**Hint 5** Adding the two pieces together, we see that the area is  $8 + 4 = 12$  ft<sup>2</sup>.

**Hint 6** The triangle has an area of 12 ft<sup>2</sup>.

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR  
**Version:** fad08542.. 2013-10-13

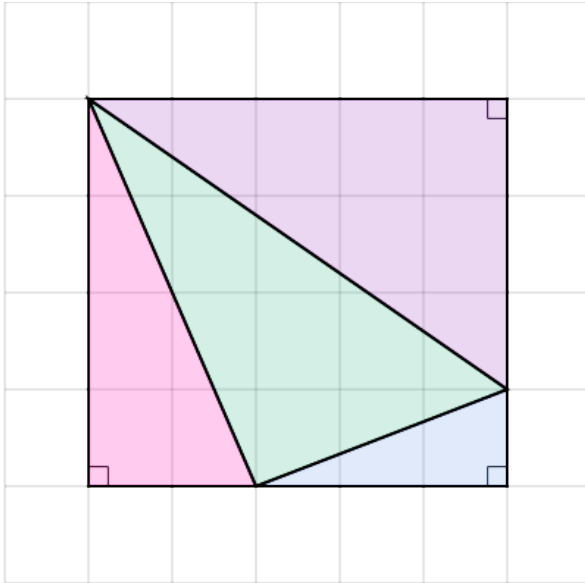
## 24 xae049f335aa2934b

**\*\*What is the area of the triangle below?\*\***

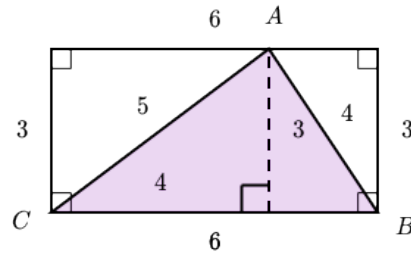


**Ans**  7 units<sup>2</sup>

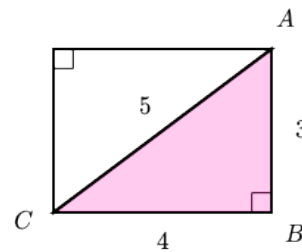
**Hint 1** We can enclose this triangle in a rectangle with area  $5 \times 4 = 20$ .



**Hint 1** The triangle is half of a rectangle that has a length of 6 feet and a width of 3 feet.

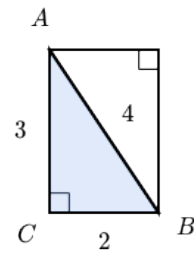


**Hint 2** It's a little easier to see that the triangle is half of the rectangle if we split the original triangle into two right triangles.



**Hint 3**

This right triangle is half of a rectangle with area  $4 \times 3 = 12$  ft<sup>2</sup>, so this right triangle has an area of 6 ft<sup>2</sup>.



**Hint 4**

The other right triangle is also half of a rectangle with area  $3 \times 2 = 6$  ft<sup>2</sup>, so the other right triangle also has an area of 3 ft<sup>2</sup>.

**Hint 5** Adding the two pieces together, we see that the area is  $6 + 3 = 9$  ft<sup>2</sup>.

**Hint 6** The triangle has an area of 9 ft<sup>2</sup>.

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** 1c04f7a8.. 2013-10-13

**Hint 2** The areas of the three additional right triangles are:

$$\frac{3 \cdot 5}{2} = 7.5$$

$$\frac{1 \cdot 3}{2} = 1.5$$

$$\frac{2 \cdot 4}{2} = 4$$

**Hint 3** The area of the original triangle can be found by subtracting the area of the additional right triangles from the area of the rectangle.

$$20 - 9 - 1.5 - 4 = 7$$

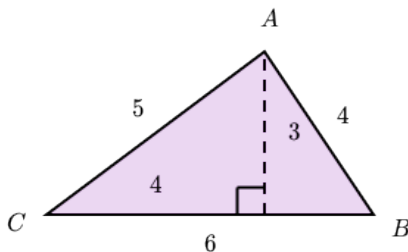
**Hint 4** The original triangle has an area of 7 units<sup>2</sup>.

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** 62f3ad3a.. 2013-10-15

## 25 xb4a8756ea356923f

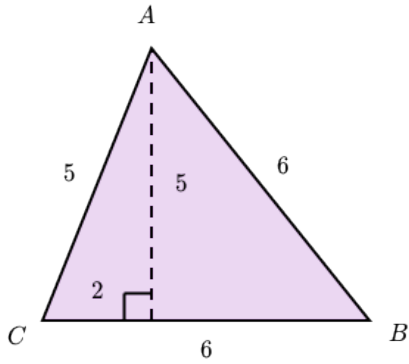
**\*\*What is the area of Triangle ABC below?\*\*** All sides lengths are measured in feet.



**Ans** [[? input-number 1]] ft<sup>2</sup> 9

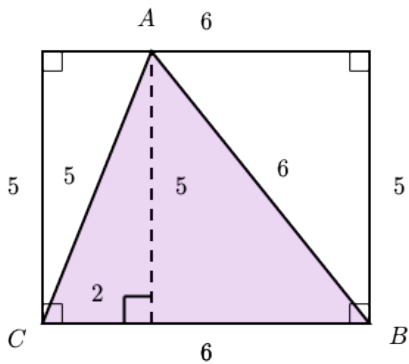
## 26 xc9cdb5fd57efcf6e

**\*\*What is the area of Triangle ABC below?\*\*** All sides lengths are measured in feet.

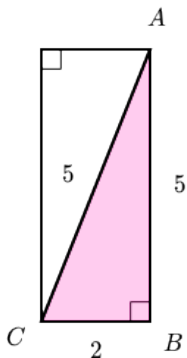


**Ans**  ft<sup>2</sup> 15

**Hint 1** The triangle is half of a rectangle that has a length of 6 feet and a width of 5 feet.

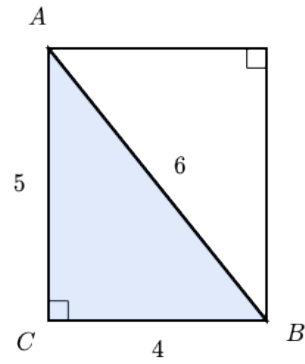


**Hint 2** It's a little easier to see that the triangle is half of the rectangle if we split the original triangle into two right triangles.



**Hint 3**

This right triangle is half of a rectangle with area  $5 \times 2 = 10$  ft<sup>2</sup>, so this right triangle has an area of 5 ft<sup>2</sup>.



**Hint 4** The other right triangle is also half of a rectangle with area  $5 \times 4 = 20$  ft<sup>2</sup>, so the other right triangle also has an area of 10 ft<sup>2</sup>.

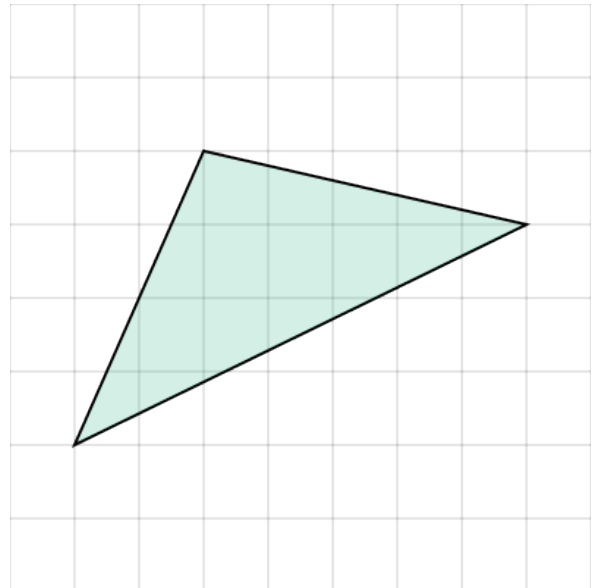
**Hint 5** Adding the two pieces together, we see that the area is  $5 + 10 = 15$  ft<sup>2</sup>.

**Hint 6** The triangle has an area of 15 ft<sup>2</sup>.

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR  
**Version:** 534cc23c.. 2013-10-13

## 27 xdc9172796068c87c

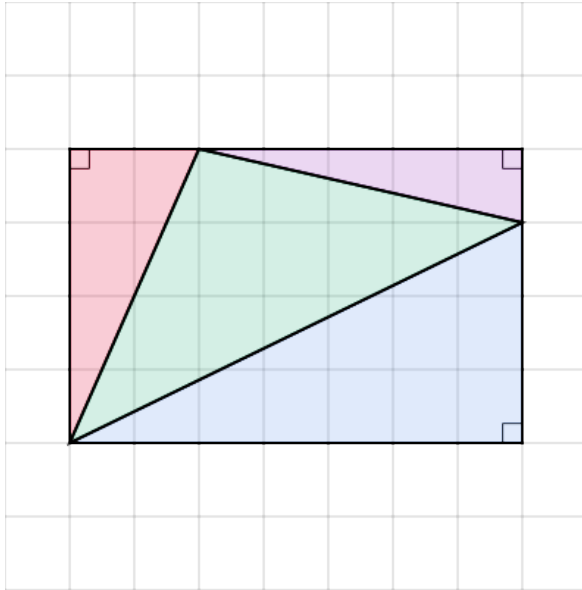
**\*\*What is the area of the triangle below?\*\***



**Ans**  units<sup>2</sup> 11

**Hint 1** We can enclose this triangle in a rectangle with area  $7 \times 4 = 28$ .





**Hint 2** The areas of the three additional right triangles are:

$$\frac{1 \cdot 5}{2} = 2.5$$

$$\frac{3 \cdot 7}{2} = 10.5$$

$$\frac{2 \cdot 4}{2} = 4$$

**Hint 3** The area of the original triangle can be found by subtracting the area of the additional right triangles from the area of the rectangle.

$$28 - 2.5 - 10.5 - 4 = 11$$

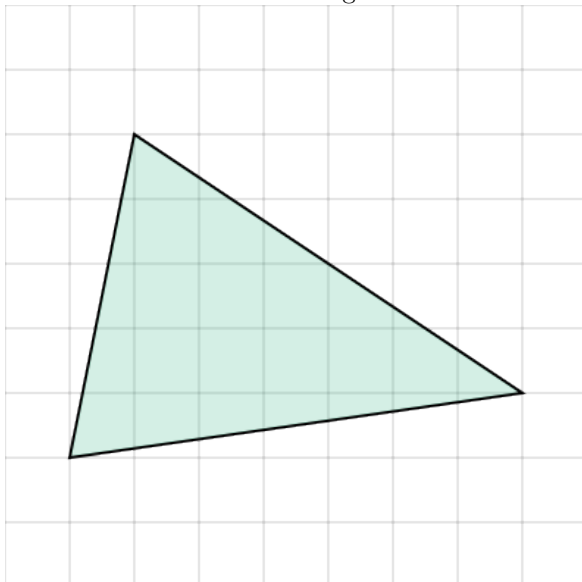
**Hint 4** The original triangle has an area of 11 units<sup>2</sup>.

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** a5a14f2c.. 2013-10-15

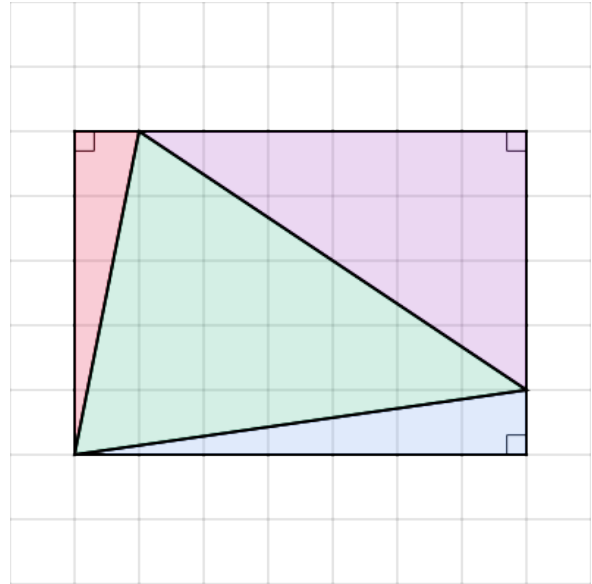
## 28 xdf8aca7477e01663

\*\*What is the area of the triangle below?\*\*



**Ans**  units<sup>2</sup> 13.5

**Hint 1** We can enclose this triangle in a rectangle with area  $7 \times 5 = 35$ .



**Hint 2** The areas of the three additional right triangles are:

$$\frac{4 \cdot 6}{2} = 12$$

$$\frac{1 \cdot 7}{2} = 3.5$$

$$\frac{1 \cdot 5}{2} = 2.5$$

**Hint 3** The area of the original triangle can be found by subtracting the area of the additional right triangles from the area of the rectangle.

$$35 - 12 - 3.5 - 2.5 = 17$$

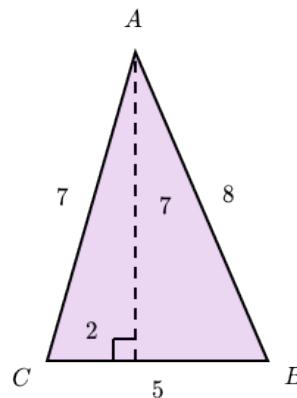
**Hint 4** The original triangle has an area of 17 units<sup>2</sup>.

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** 44f2209b.. 2013-10-15

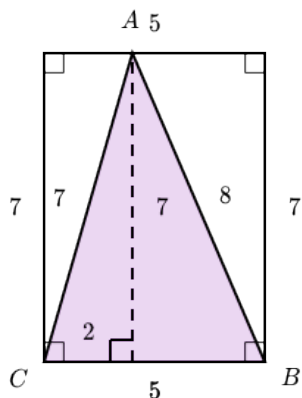
## 29 xeb71abaf1aa8154d

\*\*What is the area of Triangle  $ABC$  below?\*\* All sides lengths are measured in feet.

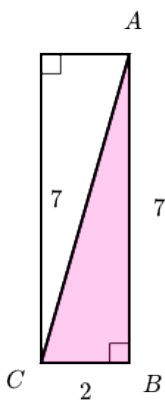


**Ans**  17.5

**Hint 1** The triangle is half of a rectangle that has a length of 7 feet and a width of 5 feet.

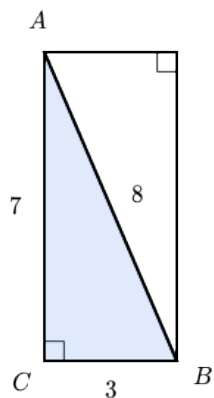


**Hint 2** It's a little easier to see that the triangle is half of the rectangle if we split the original triangle into two right triangles.



**Hint 3**

This right triangle is half of a rectangle with area  $7 \times 2 = 14$   $\text{ft}^2$ , so this right triangle has an area of 7  $\text{ft}^2$ .



**Hint 4**

The other right triangle is also half of a rectangle with area  $7 \times 3 = 21$   $\text{ft}^2$ , so the other right triangle also has an area of 10.5  $\text{ft}^2$ .

**Hint 5** Adding the two pieces together, we see that the area is  $7 + 10.5 = 17.5$   $\text{ft}^2$ .

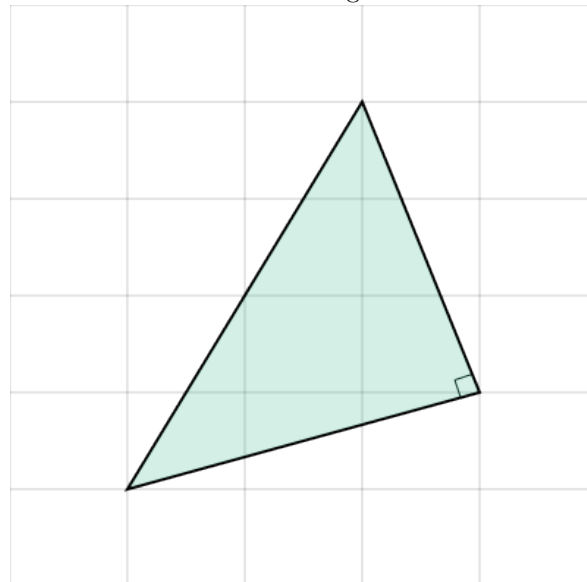
**Hint 6** The triangle has an area of 17.5  $\text{ft}^2$ .

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** baebff16.. 2013-10-13

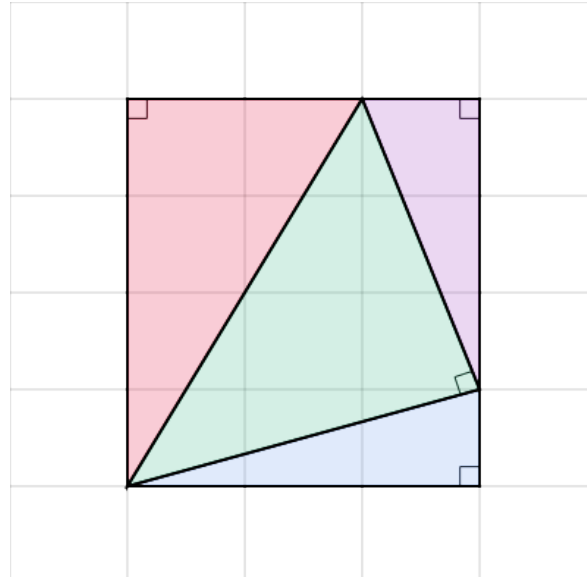
## 30 xf2f666ecec4b1cac

\*\*What is the area of the triangle below?\*\*



**Ans**  8

**Hint 1** We can enclose this triangle in a rectangle with area  $4 \times 3 = 12$ .



**Hint 2** The areas of the three additional right triangles are:

$$\frac{1 \cdot 3}{2} = 1.5$$

$$\frac{1 \cdot 3}{2} = 1.5$$

$$\frac{2 \cdot 4}{2} = 4$$

**Hint 3** The area of the original triangle can be found by subtracting the area of the additional right triangles from the area of the rectangle.

$$15 - 1.5 - 1.5 - 4 = 8$$

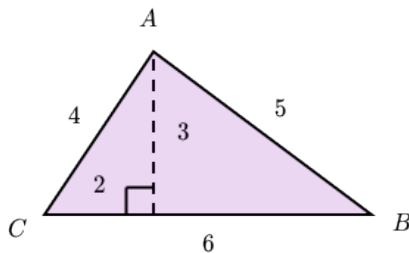
**Hint 4** The original triangle has an area of 8 units<sup>2</sup>.

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** b04403c0.. 2013-10-15

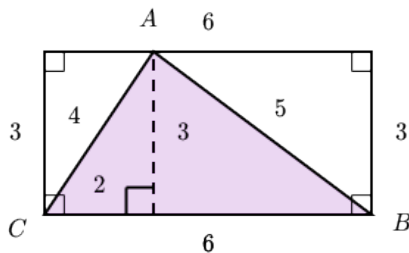
## 31 xfad327ad9be41e38

**\*\*What is the area of Triangle ABC below?\*\*** All sides lengths are measured in feet.

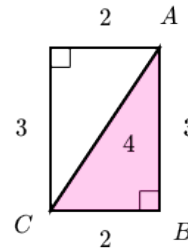


**Ans**  ft<sup>2</sup> 9

**Hint 1** The triangle is half of a rectangle that has a length of 6 feet and a width of 3 feet.

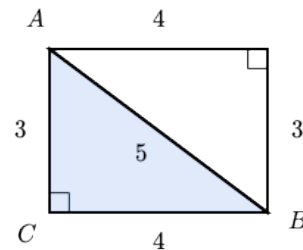


**Hint 2** It's a little easier to see that the triangle is half of the rectangle if we split the original triangle into two right triangles.



**Hint 3**

This right triangle is half of a rectangle with area  $3 \times 2 = 6$  ft<sup>2</sup>, so this right triangle has an area of 3 ft<sup>2</sup>.



**Hint 4**

The other right triangle is also half of a rectangle with area  $4 \times 3 = 12$  ft<sup>2</sup>, so the other right triangle also has an area of 6 ft<sup>2</sup>.

**Hint 5** Adding the two pieces together, we see that the area is  $3 + 6 = 9$  ft<sup>2</sup>.

**Hint 6** The triangle has an area of 9 ft<sup>2</sup>.

**Tags:** CC.6.G.A.1, Area of Triangle 1.2, SB.6.1.H.1.CR

**Version:** 080107c1.. 2013-10-13