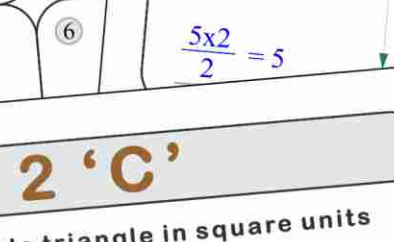
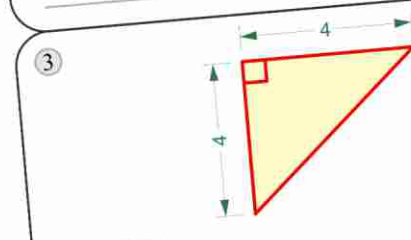
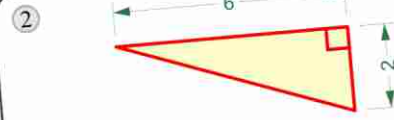
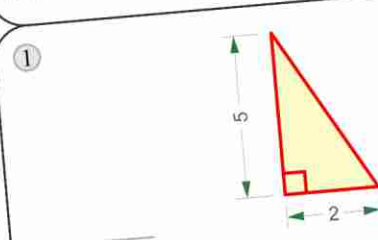


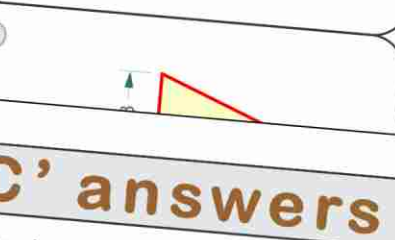
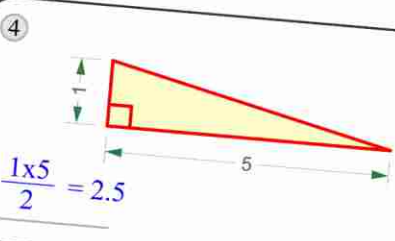
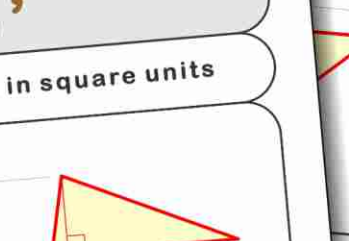
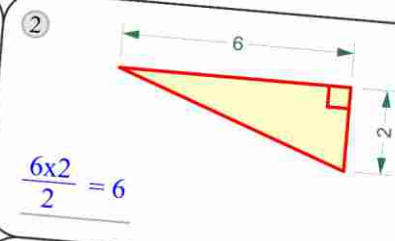
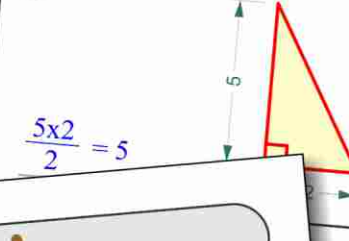
Areas 2 'A'

Find the total area of the right angle triangle in square units



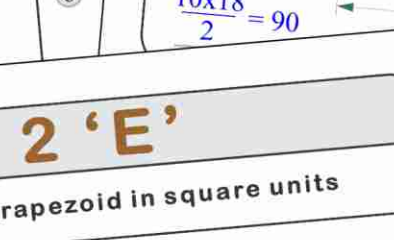
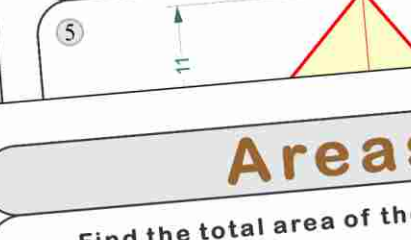
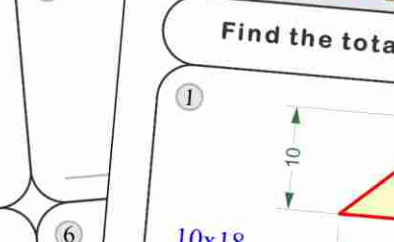
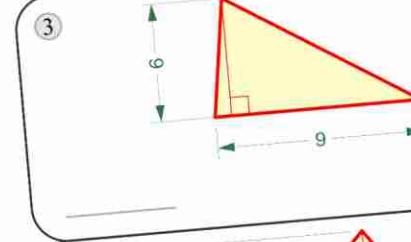
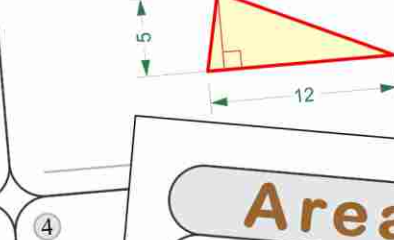
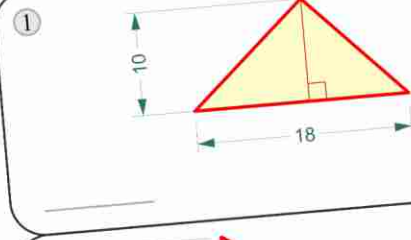
Areas 2 'A' answers

Find the total area of the right angle triangle



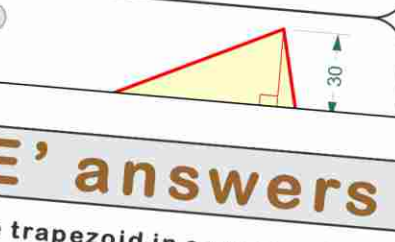
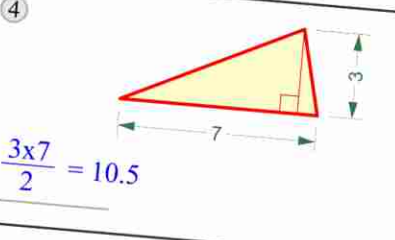
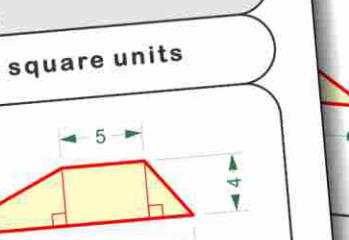
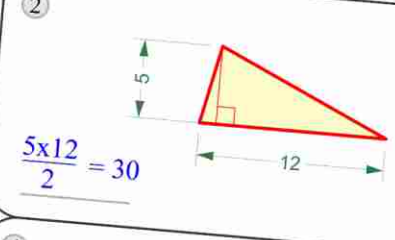
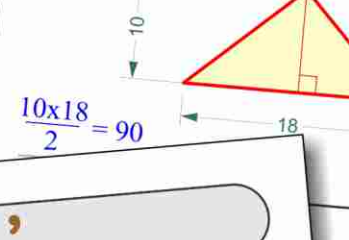
Areas 2 'C'

Find the total area of the angle triangle in square units



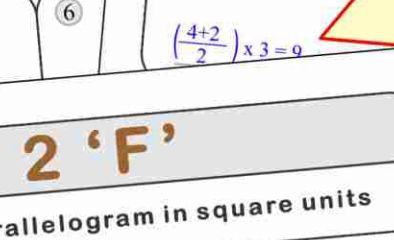
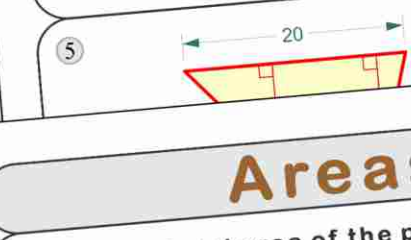
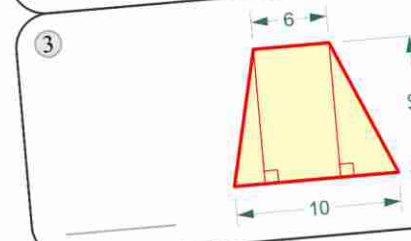
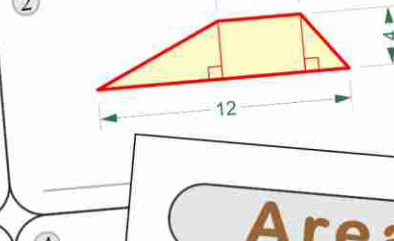
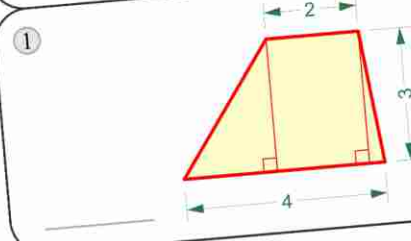
Areas 2 'C' answers

Find the total area of the angle triangle in square units



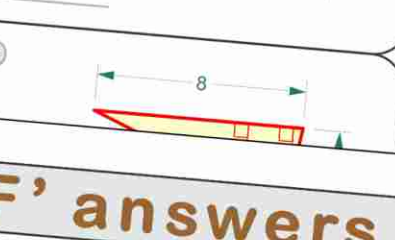
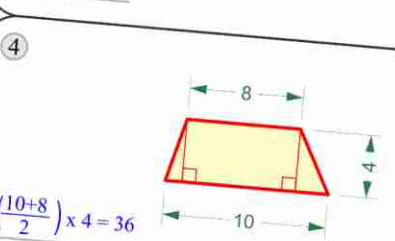
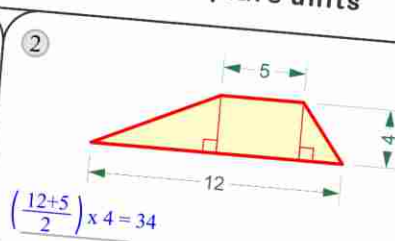
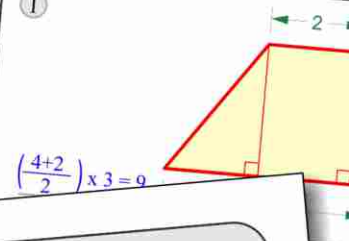
Areas 2 'E'

Find the total area of the trapezoid in square units



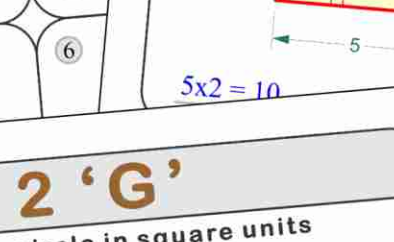
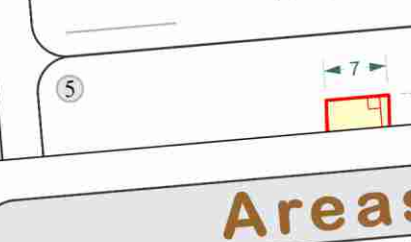
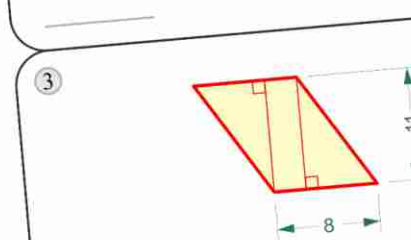
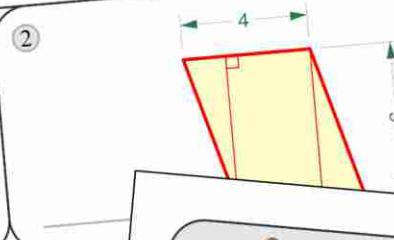
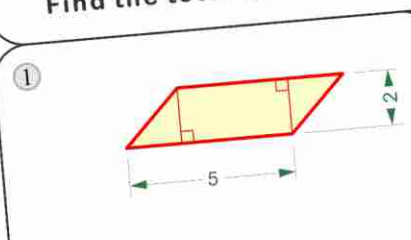
Areas 2 'E' answers

Find the total area of the trapezoid in square units



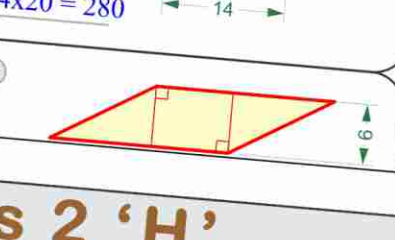
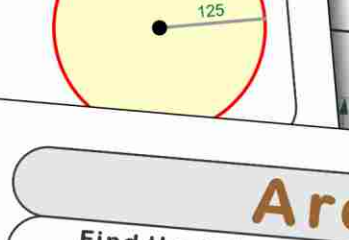
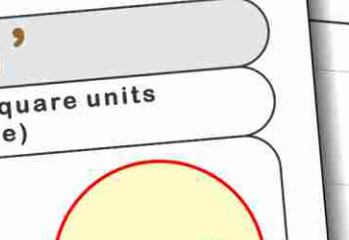
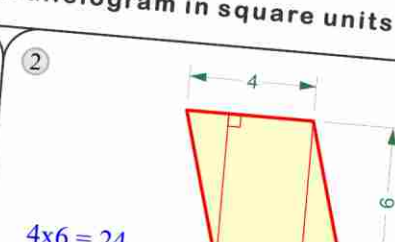
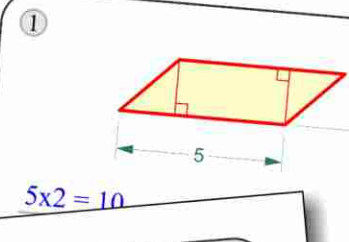
Areas 2 'F'

Find the total area of the parallelogram in square units



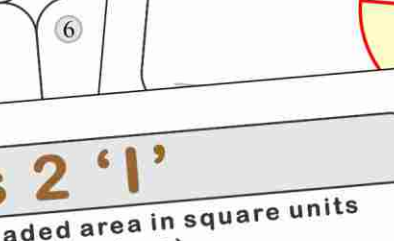
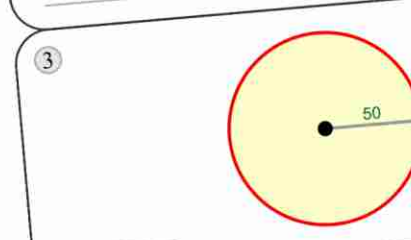
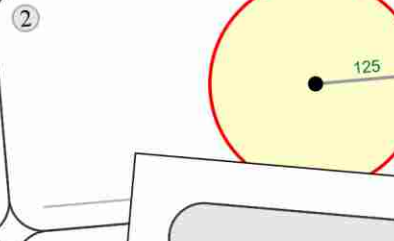
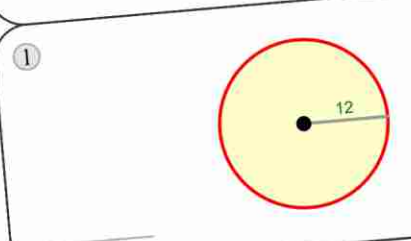
Areas 2 'F' answers

Find the total area of the parallelogram in square units



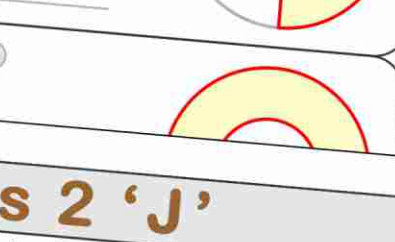
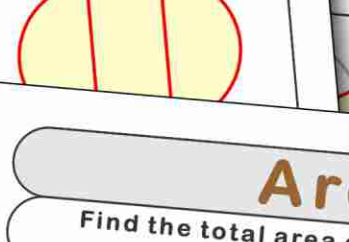
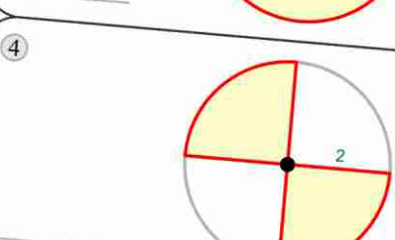
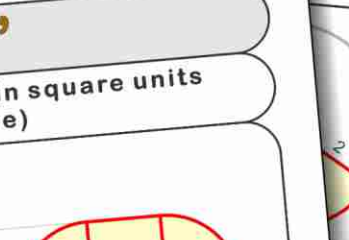
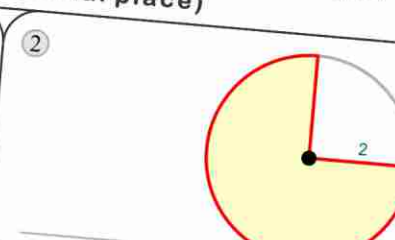
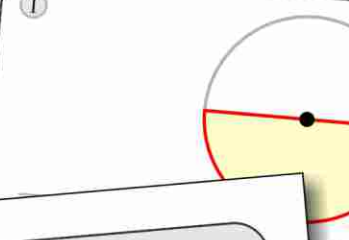
Areas 2 'G'

Find the total area of the circle in square units (correct to 1 decimal place)



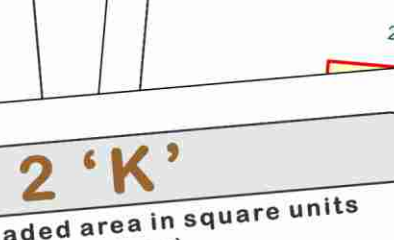
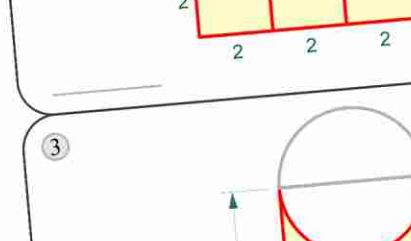
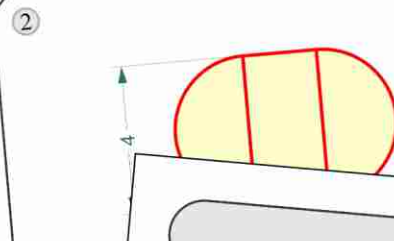
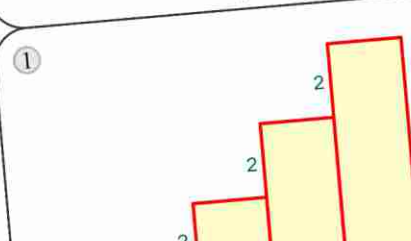
Areas 2 'H'

Find the total area of the shaded area in square units (correct to 1 decimal place)



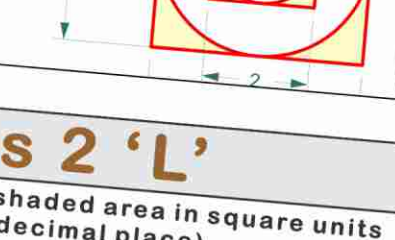
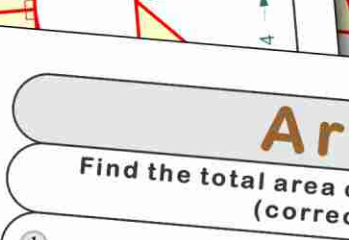
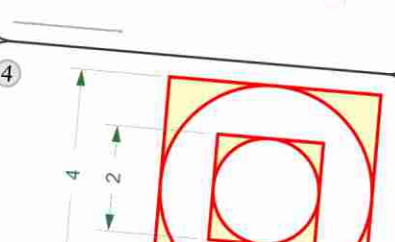
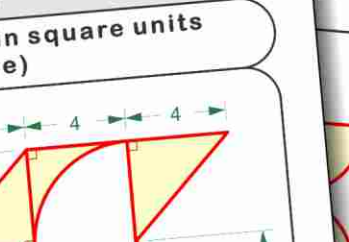
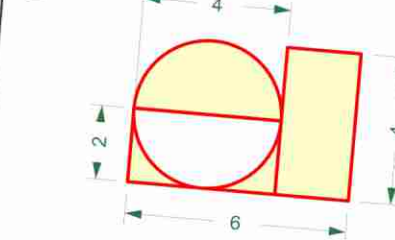
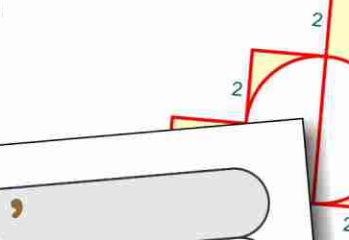
Areas 2 'I'

Find the total area of the shaded area in square units (correct to 1 decimal place)



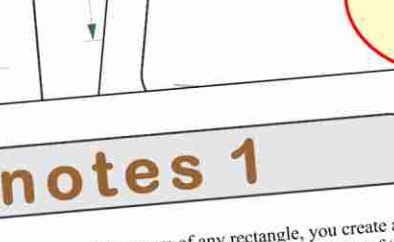
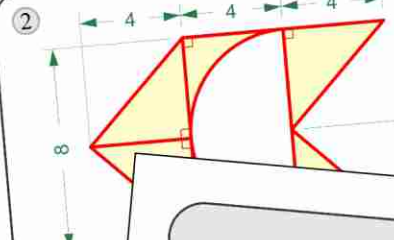
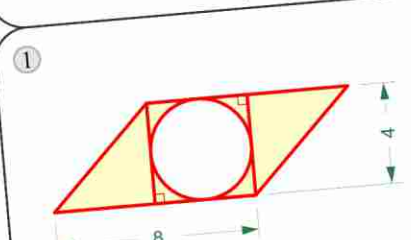
Areas 2 'J'

Find the total area of the shaded area in square units (correct to 1 decimal place)



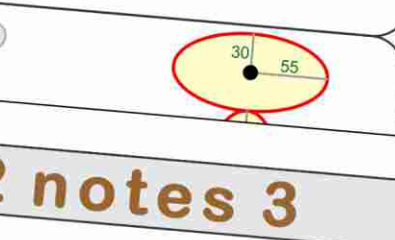
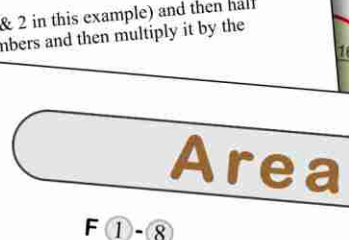
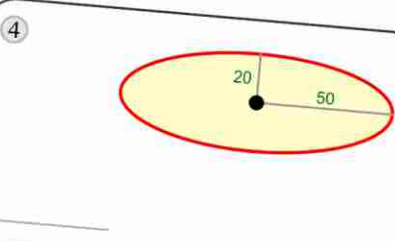
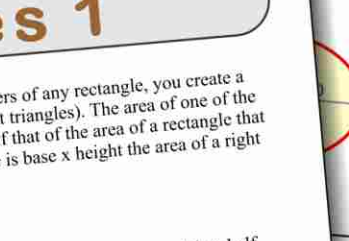
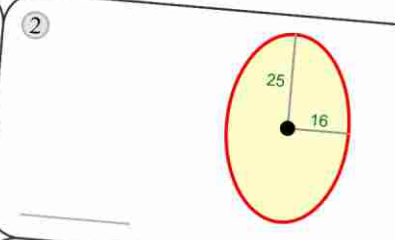
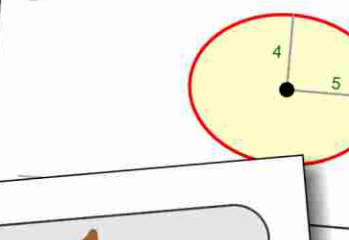
Areas 2 'K'

Find the total area of the shaded area in square units (correct to 1 decimal place)



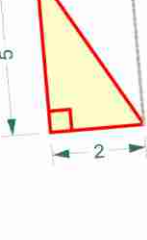
Areas 2 'L'

Find the total area of the shaded area in square units (correct to 1 decimal place)



Areas 2 notes 1

A 1-8

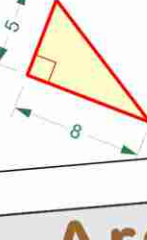


If you draw a straight line from opposite corners of any rectangle, you create a right triangle (actually you create 2 equal right triangles). The area of one of the resulting right triangles is therefore exactly half that of the area of a rectangle that you started with. Since the area of a rectangle is base x height the area of a right triangle is therefore half of that:

$$\text{Area of a triangle} = \frac{bh}{2}$$

You can either multiply the two numbers (5 & 2 in this example) and then half that total, or you can half one of the two numbers and then multiply it by the other.

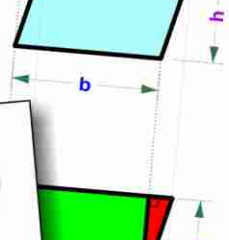
B 1-8



Although the triangle might look different (a little), it's still a right triangle and the height applies.

Areas 2 notes 3

F 1-8



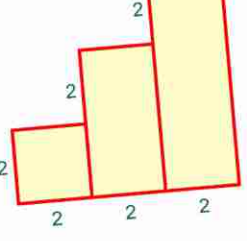
What's the area of a parallelogram with base width b and perpendicular height h?

Split the parallelogram into a rectangle and 2 equal sized right-angle triangles at the ends.

Rearrange the triangles and rectangle to make one big rectangle - which is the exact same area of the original parallelogram

Areas 2 notes 5

I 1



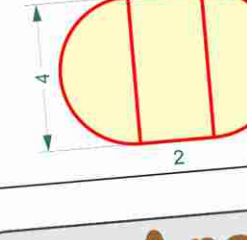
Here we have 3 rectangles. The one on the left is 2x2, the one in the middle is 2x4 and the one on the right is 2x6. Simply add all three together:

$$\text{Area} = (2 \times 2) + (2 \times 4) + (2 \times 6)$$

$$\text{Area} = 4 + 8 + 12$$

$$\text{Area} = 24$$

I 2



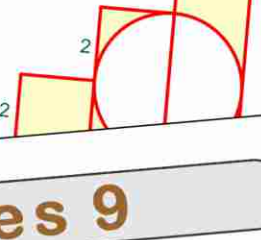
This shape is made from two semi-circles and a rectangle. We can rearrange the pieces to make a rectangle that's 2x4. The total area is therefore:

$$\text{Area} = \pi \times 2^2 + (2 \times 4)$$

$$\text{Area} = 4\pi + 8 = 20.6$$

Areas 2 notes 7

J 1



Here we have three rectangles of 2x2, 2x4 & 2x6 but they are obscured by a circle of radius 2. We just add up the area of all the rectangles and then subtract the area of the circle.

$$\text{Area} = (2 \times 2) + (2 \times 4) + (2 \times 6) - \pi \times 2^2$$

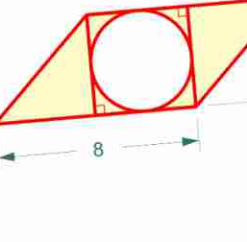
$$\text{Area} = 4 + 8 + 12 - 4\pi$$

$$\text{Area} = 24 - 4\pi$$

$$\text{Area} = 11.4$$

Areas 2 notes 9

K 1



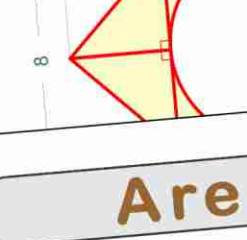
The shaded area here consists of a parallelogram but with the space occupied by a circle removed. The solution is therefore to calculate the area of the parallelogram and then to subtract the area of the circle:

$$\text{Area} = (8 \times 4) - \pi \times 2^2$$

$$\text{Area} = 32 - 4\pi$$

$$\text{Area} = 19.4$$

K 2



We can rearrange the two triangles at the ends to form a perfect rectangle of 2x4.

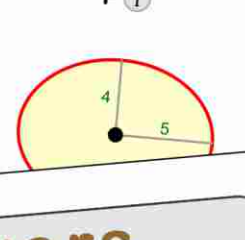
$$\text{Area} = (8 \times 4) - \pi \times 2^2$$

$$\text{Area} = 32 - 4\pi$$

$$\text{Area} = 19.4$$

Areas 2 notes 10

F 1

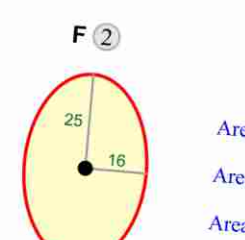


$$\text{Area} = \pi \times 4 \times 5$$

$$\text{Area} = 20\pi$$

$$\text{Area} = 62.8$$

F 2

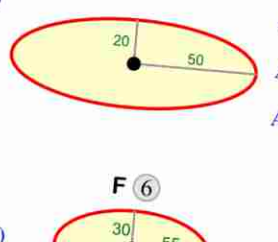


$$\text{Area} = \pi \times 25 \times 16$$

$$\text{Area} = 4000\pi$$

$$\text{Area} = 12566.6$$

F 4

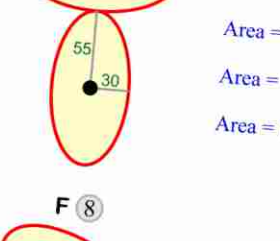


$$\text{Area} = \pi \times 20 \times 50$$

$$\text{Area} = 1000\pi$$

$$\text{Area} = 3141.6$$

F 6



$$\text{Area} = 2(\pi \times 30 \times 55)$$

$$\text{Area} = 2 \times 1650\pi$$

$$\text{Area} = 3300\pi$$

$$\text{Area} = 10367.3$$

F 8

