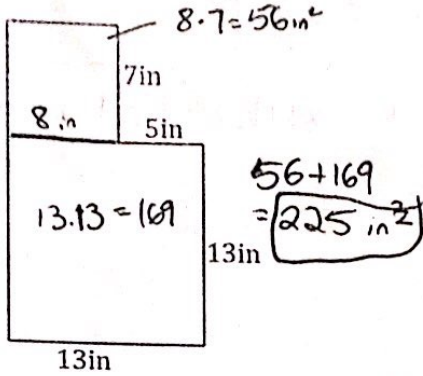
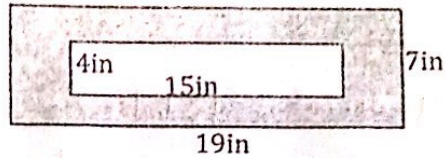


Find the area of each shape.

7.



8. Find the shaded area.

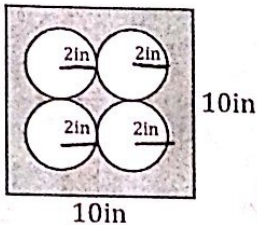


Area of larger rectangle  
 $A = 19 \cdot 7 = 133 \text{ in}^2$

Area of white rect.

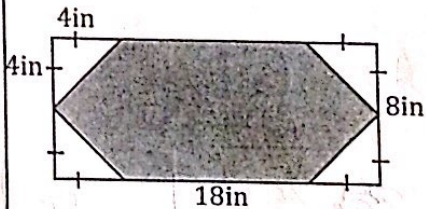
$A = 15 \cdot 4 = 60 \text{ in}^2$   
 $133 - 60 = 73 \text{ in}^2$

9. Find the shaded area.



Square =  $10 \cdot 10 = 100$   
 1 circle =  $\pi(2^2) = 4\pi \approx 12.57$   
 4 circles Area =  $4(12.57) = 50.27 \text{ in}^2$   
 $100 - 50.27 \text{ in}^2 = 49.73 \text{ in}^2$

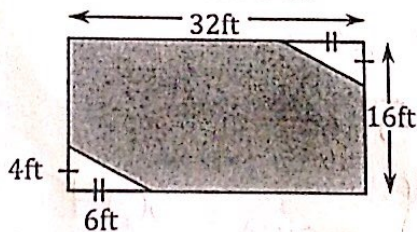
10. Find the shaded area.



Rectangle =  $18 \cdot 8 = 144 \text{ in}^2$

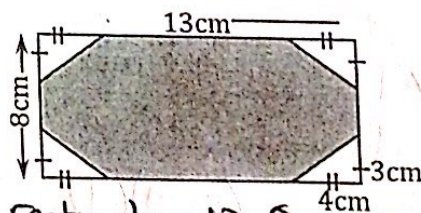
~~4~~ triangle =  $8 \text{ in}^2$   
 $144 - 4(8) = 112 \text{ in}^2$

11. Find the shaded area.



rectangle =  $32 \cdot 16 = 512 \text{ ft}^2$   
~~2~~ triangle =  $\frac{6 \cdot 4}{2} = \frac{24}{2} = 12$   
 Shaded area =  $512 - 12 - 12 = 488 \text{ ft}^2$

12. Find the shaded area.



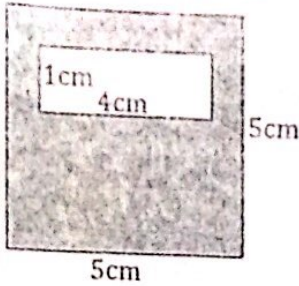
rectangle =  $13 \cdot 8 = 104 \text{ cm}^2$

triangles =  $\frac{4 \cdot 3}{2} = \frac{12}{2} = 6 \text{ cm}^2$

Shaded area =  $104 - 4(6) = 80 \text{ cm}^2$

Find the area of each shape.

13. Find the shaded area.

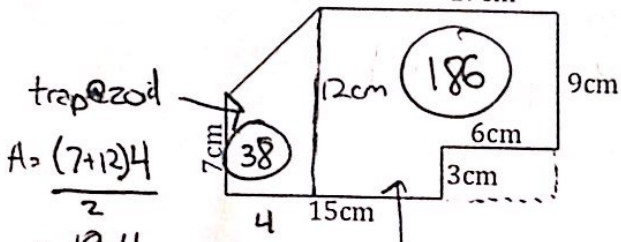


Rectangle =  $1 \cdot 4 = 4 \text{ cm}^2$

Square =  $5 \cdot 5 = 25 \text{ cm}^2$

Shaded area  
 $= 25 - 4 = 21 \text{ cm}^2$

15.

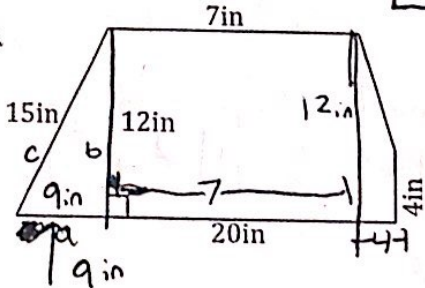


trapezoid  
 $A = \frac{(7+4) \cdot 12}{2}$   
 $= \frac{19 \cdot 12}{2}$   
 $= \frac{228}{2} = 114$

$(12)(17) - (6 \cdot 3)$   
 $= 204 - 18 = 186$

Total area =  $186 + 38 = 224 \text{ cm}^2$

17.



$a^2 + 12^2 = 15^2$   
 $a^2 + 144 = 225$   
 $144 - 144$

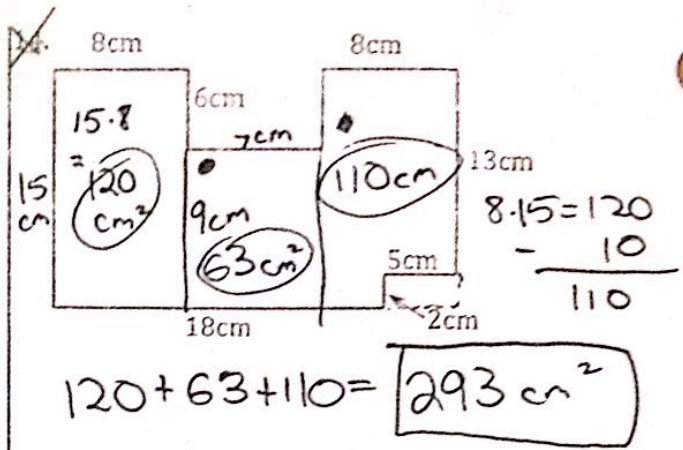
$\sqrt{a^2} = \sqrt{81}$   
 $a = 9$

Area of triangle  
 $\frac{(9)(12)}{2} = 54 \text{ in}^2$

rectangle  
 $7 \cdot 12 = 84 \text{ in}^2$

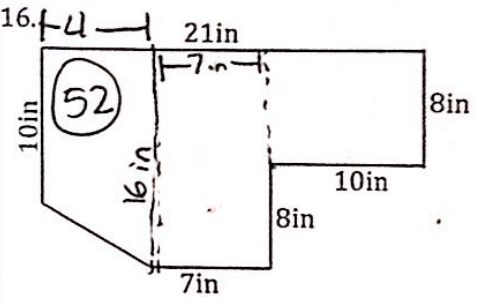
trapezoid  
 $A = \frac{(b_1 + b_2)h}{2} = \frac{(12+4)(4)}{2}$

$= \frac{16 \cdot 4}{2} = 32 \text{ in}^2$   
 Total area =  $54 + 84 + 32 = 170 \text{ in}^2$



$120 + 63 + 110 = 293 \text{ cm}^2$

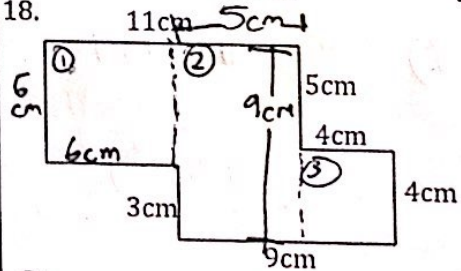
16.



trapezoid  
 $\frac{(10+4)(4)}{2} = \frac{26 \cdot 4}{2} = \frac{104}{2} = 52 \text{ in}^2$

rect. 1 =  $16 \cdot 7 = 112 \text{ in}^2$   
 rect. 2 =  $10 \cdot 8 = 80 \text{ in}^2$   
 total =  $52 + 112 + 80 = 244 \text{ in}^2$

18.



①  $6 \cdot 6 = 36 \text{ cm}^2$   
 ②  $9 \cdot 5 = 45 \text{ cm}^2$   
 ③  $4 \cdot 4 = 16$   
 total surface area =  $36 + 45 + 16 = 97 \text{ cm}^2$