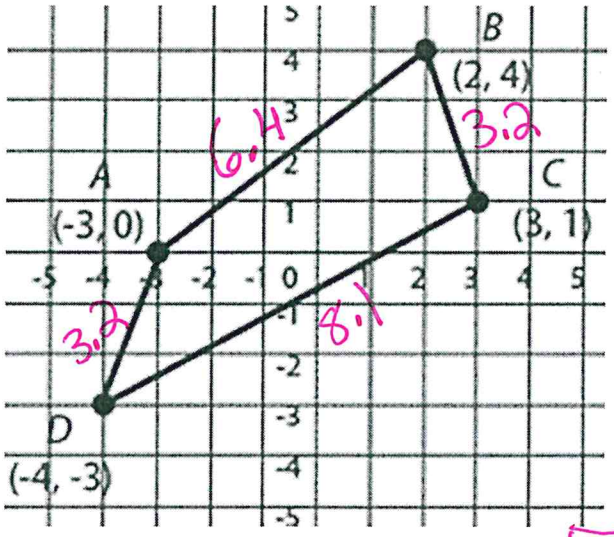
1.

19 Units

Calculate the perimeter:

*Distance Formula: $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$



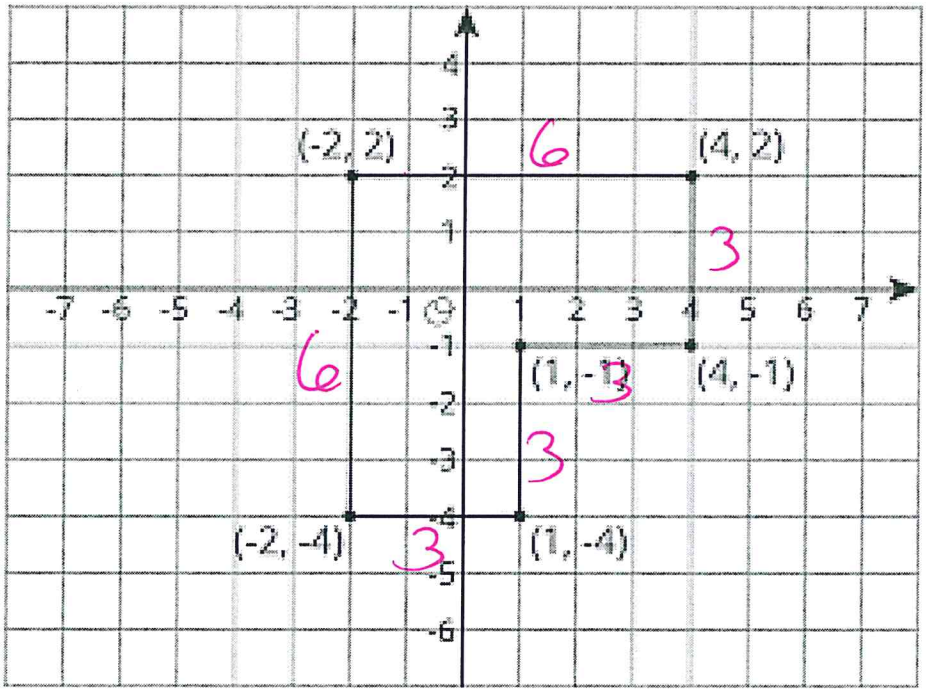
$P = 6.4 + 3.2 + 3.2 + 8.1 =$ **20.9 units**

2.

$84\ in^2$

Calculate the perimeter:

*Can count vertical + horizontal distance.

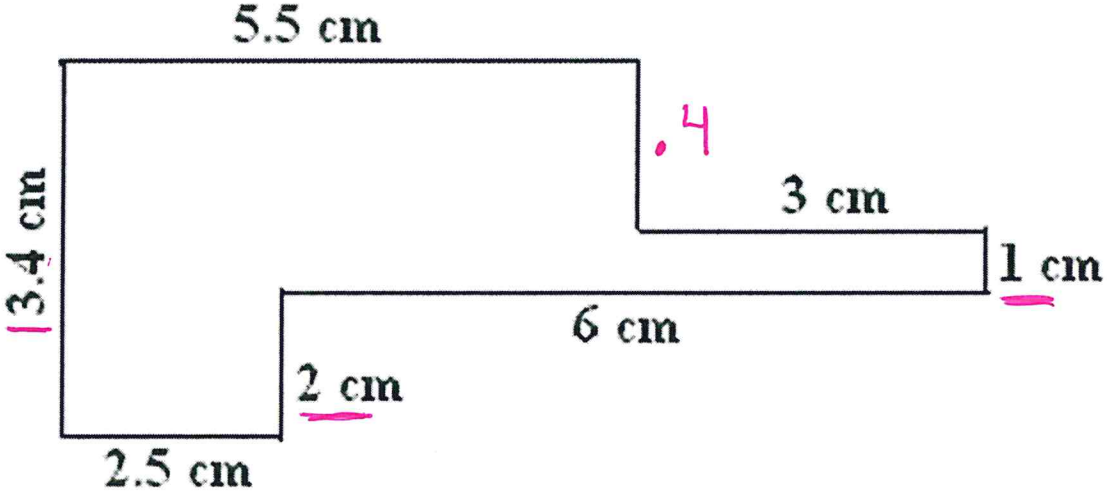


$P = 6+6+3+3+3+3 =$ **24 units**

3.

39 m^2

Calculate the perimeter:



$P = 3.4 + 5.5 + .4 + 3 + 1 + 6 + 2 + 2.5 =$

23.8 cm

4.

$25\ m^2$

Calculate the perimeter:

Pythag. Thm.

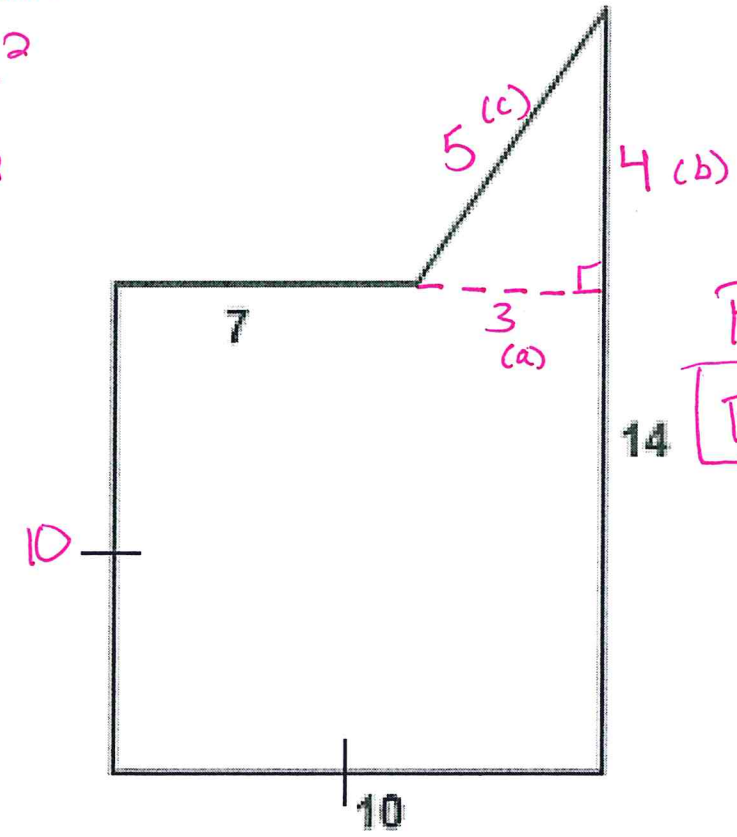
$a^2+b^2=c^2$

$3^2+4^2=c^2$

$9+16=c^2$

$\sqrt{25}=\sqrt{c^2}$

$5=c$



$P=10+7+5+14+10$

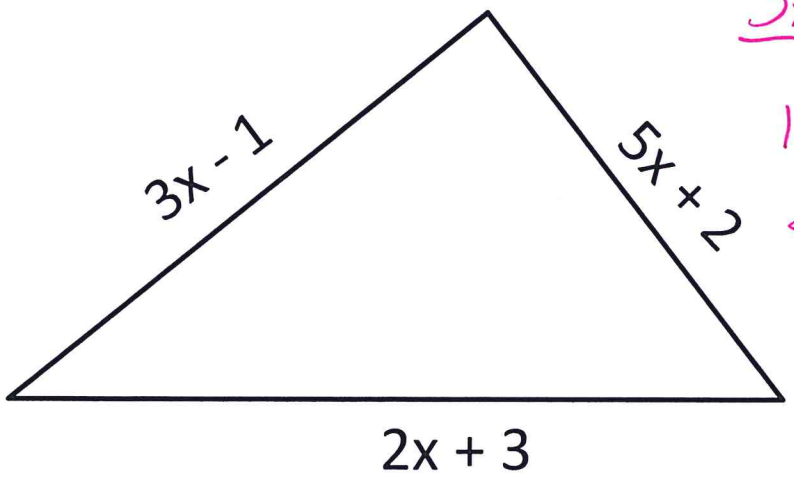
$P=46$ units

5.

31 ft

Solve for the variable for the given triangle.

Perimeter = 84



$3x-1+5x+2+2x+3=84$

$10x+4=84$

$-4 \quad -4$

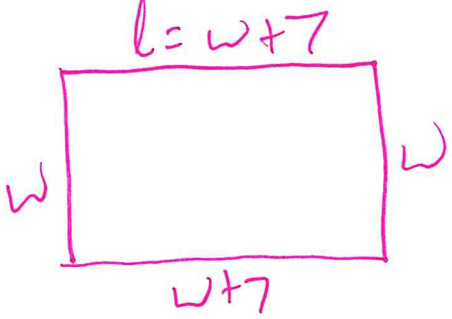
$\frac{10x}{10} = \frac{80}{10}$

$x = 8$

6.

112.5 Units^2

The length of a rectangle is 7 more than the width. What is the length of the rectangle if the perimeter is 62 units?



$P = w + w + w + 7 + w + 7$

$62 = 4w + 14$

$-14 \quad -14$

$48 = 4w$

$\frac{48}{4} = \frac{4w}{4}$

$12 = w$

$l = w + 7$

$l = 12 + 7$

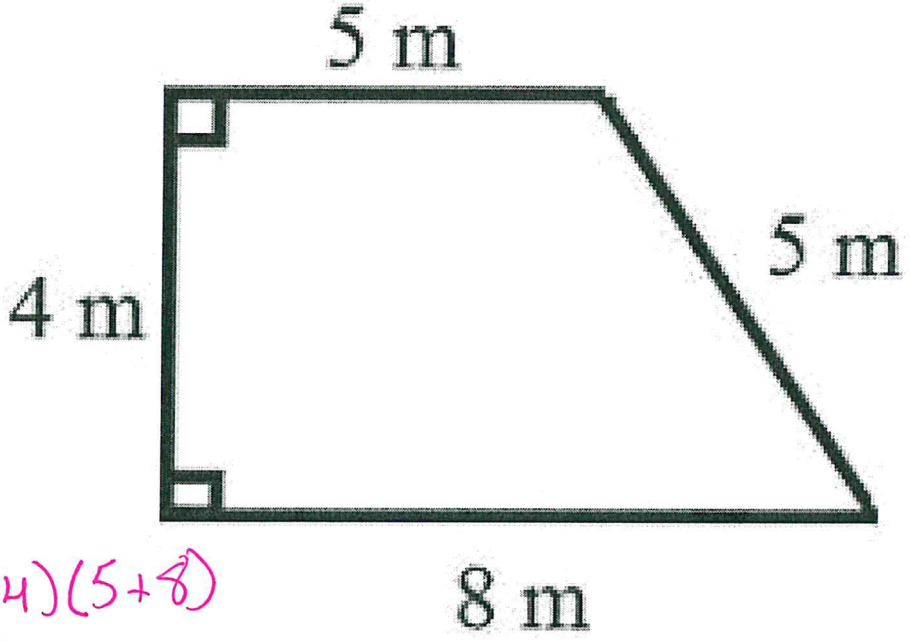
$l = 19$ units

7.

46 Units

Find the area:

Area of a Trapezoid: $A = \frac{1}{2} \cdot h \cdot (b_1 + b_2)$



$A = \frac{1}{2}(4)(5+8)$

$A = \frac{1}{2}(4)(13)$

$A = 26\ m^2$

8.

20.9 Units

Find the area:

Pythag. Thm.: $a^2+b^2=c^2$

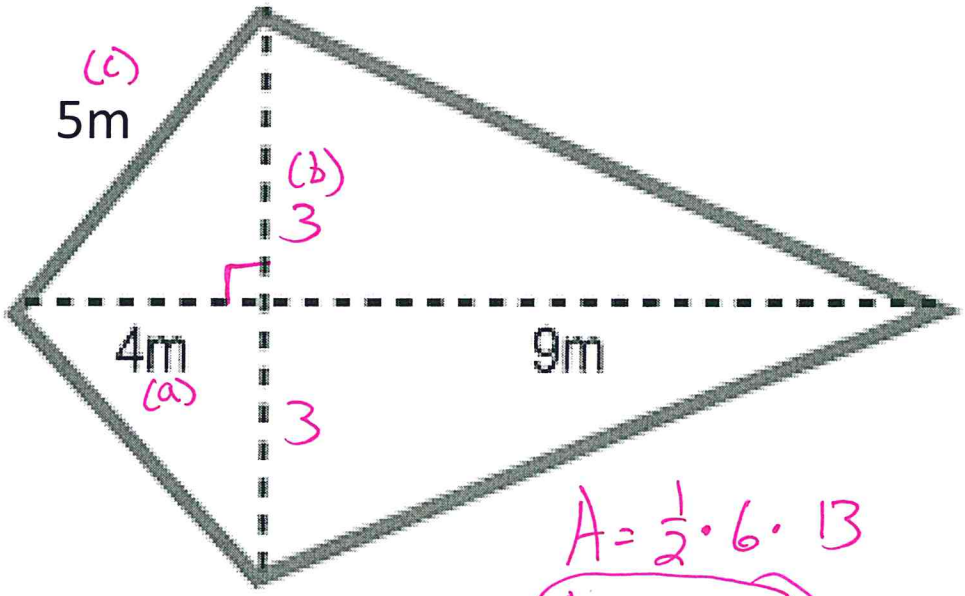
$4^2+b^2=5^2$

$16+b^2=25$

$\sqrt{b^2}=\sqrt{9}$

$b=3$

Area of a Kite: $A=\frac{1}{2}\cdot d_1 \cdot d_2$



$A=\frac{1}{2}\cdot 6\cdot 13$

$A=39\ m^2$

9.

$60\ cm^2$

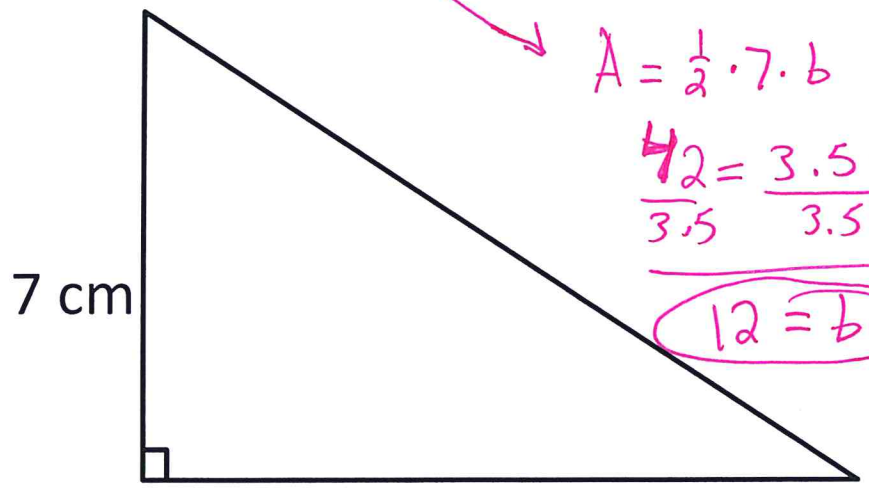
The area of the triangle is $42cm^2$. Find the base.

Area of a $\triangle$: $\frac{1}{2} \cdot b \cdot h$

$A = \frac{1}{2} \cdot 7 \cdot b$

$\frac{42}{3.5} = \frac{3.5 \cdot b}{3.5}$

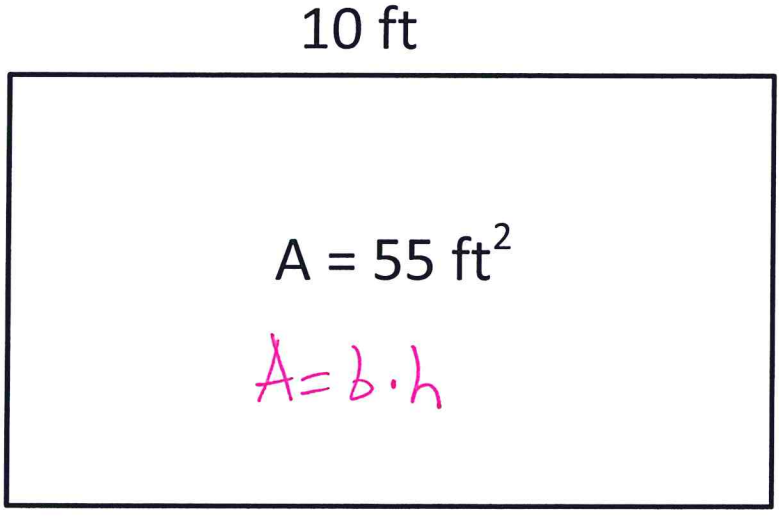
$12 = b$



10.

12 cm

Find the perimeter of the rectangle:



$\frac{55}{10} = \frac{10 \cdot h}{10}$

$5.5 = h$

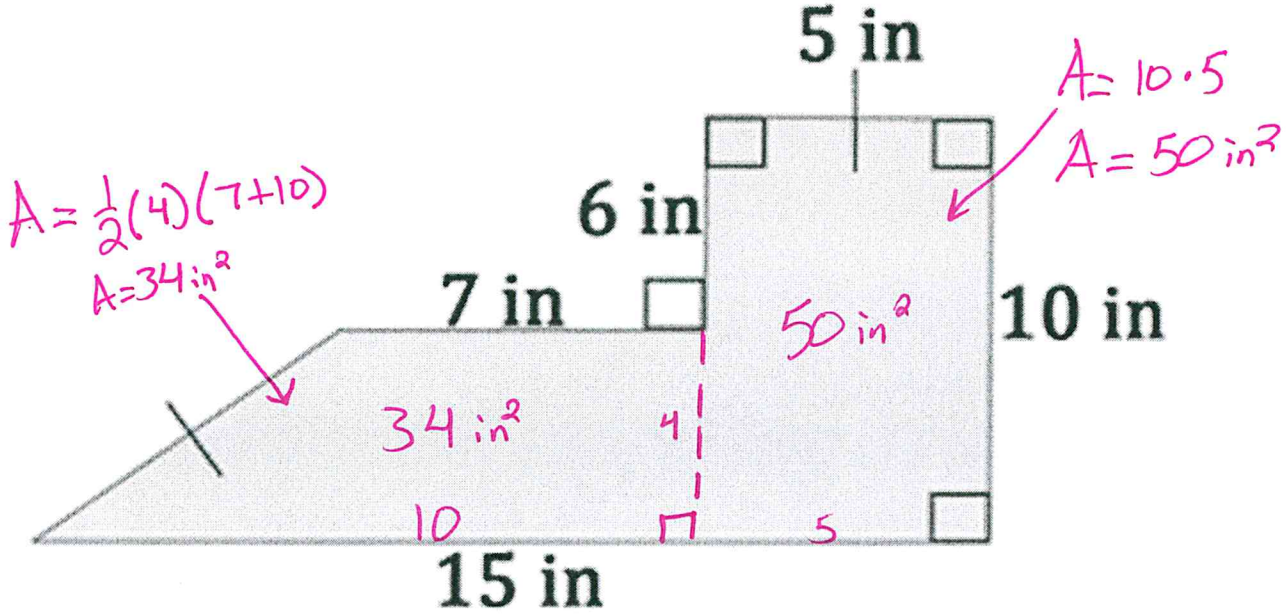
$A = b \cdot h$

$P = 10 + 10 + 5.5 + 5.5 = 31$ ft.

11.

$26\ m^2$

Find the area:

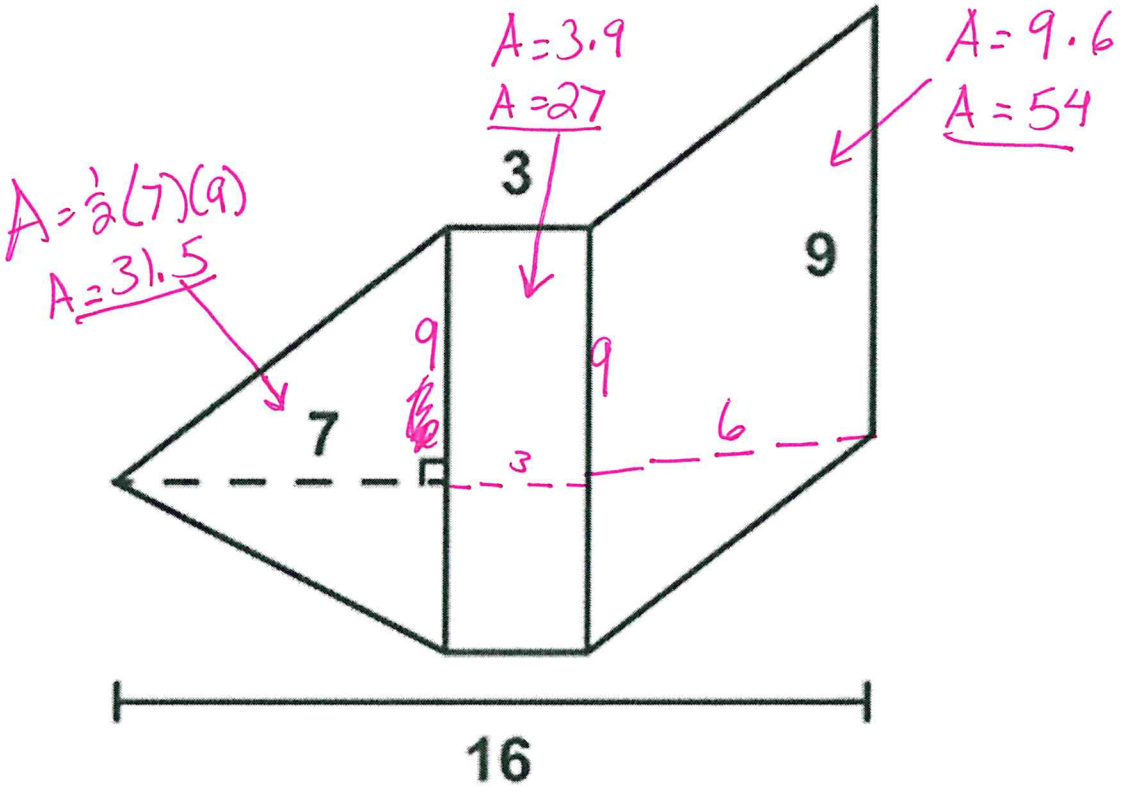


$A = 34 + 50 = \boxed{84\ in.^2}$

12.

24 Units

Find the area:

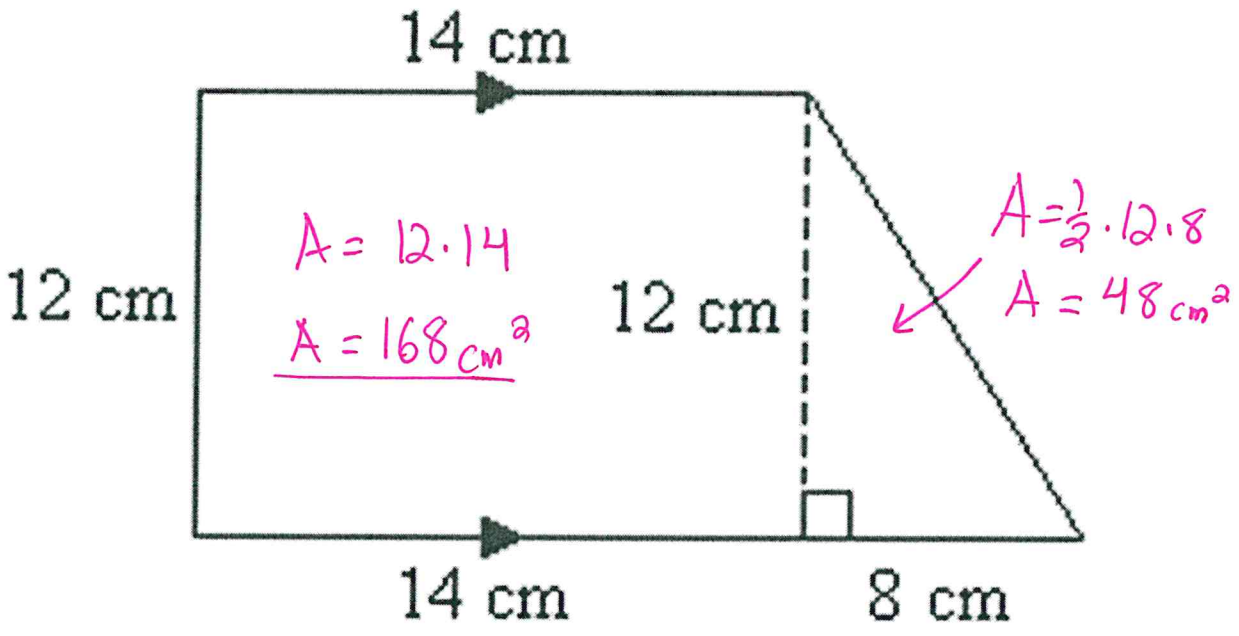


$A = 31.5 + 27 + 54 = \boxed{112.5 \text{ units}^2}$

13.

8

Find the area:



$A = 12 \cdot 14$

$A = 168\ cm^2$

$A = \frac{1}{2} \cdot 12 \cdot 8$

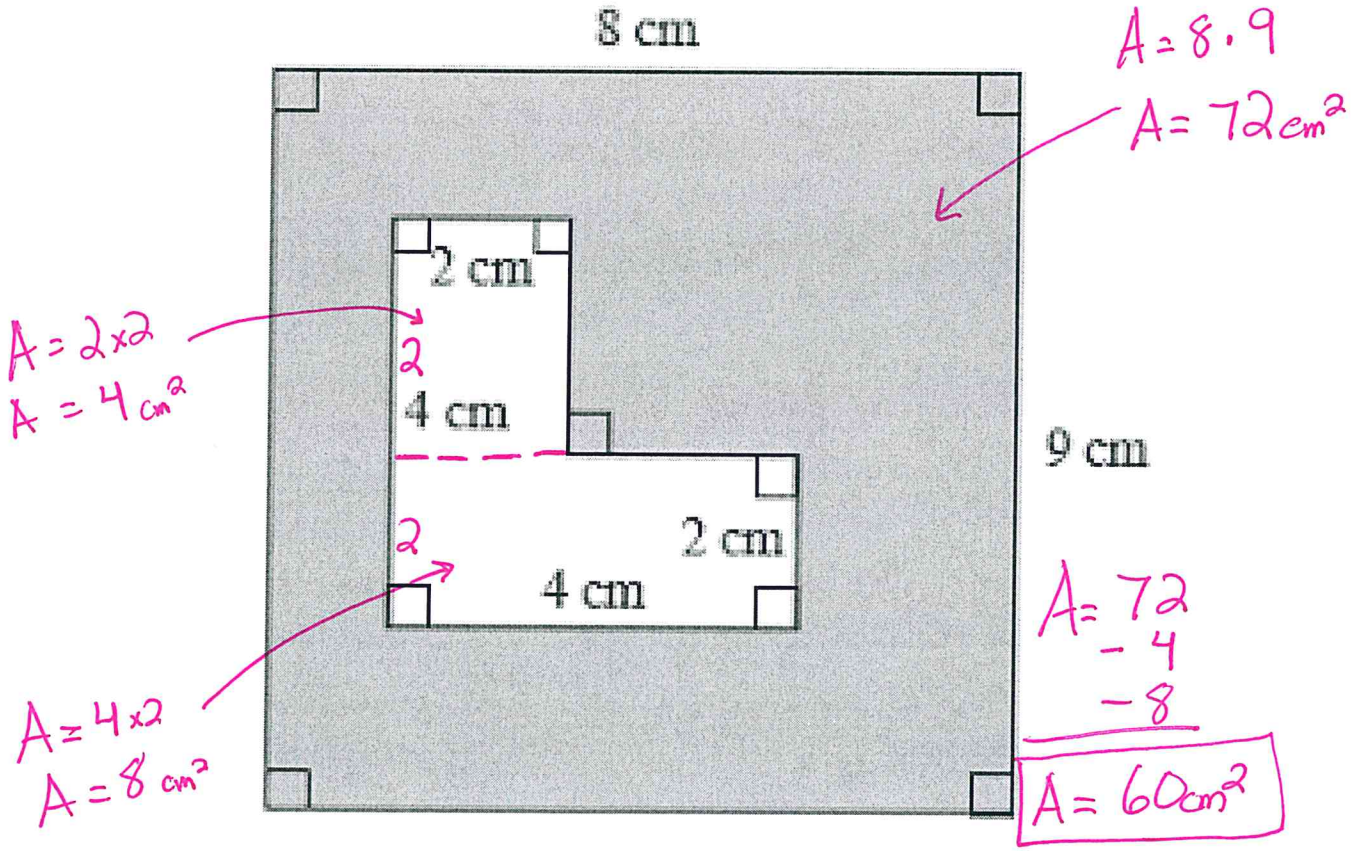
$A = 48\ cm^2$

$A = 168 + 48 = \boxed{216\ cm^2}$

14.

23.8 cm

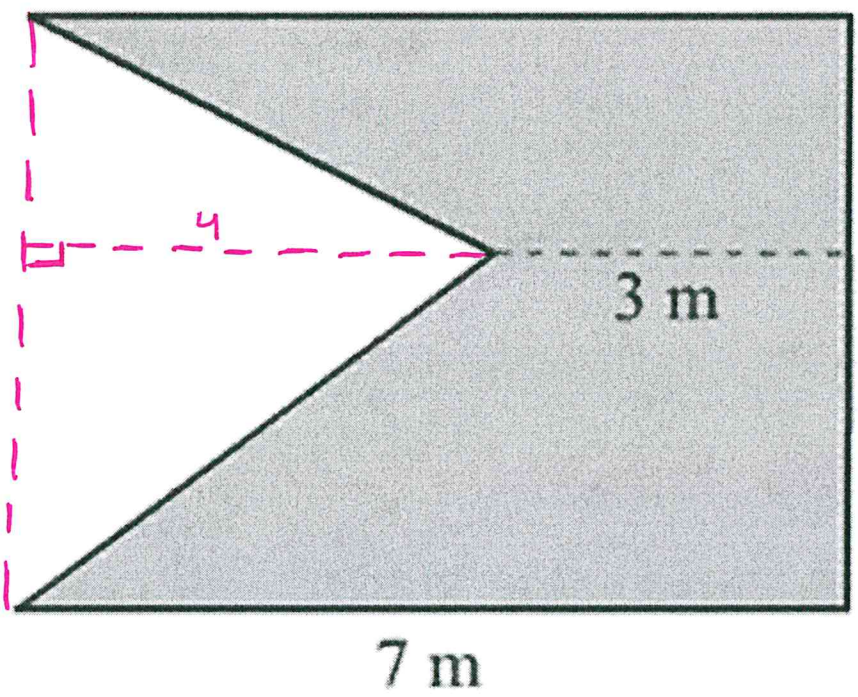
Find the area of the shaded region:



15.

$216\ cm^2$

Find the area of the shaded region:



Area of Triangle:

$A = \frac{1}{2}(5)(4)$

$A = 10\ m^2$

Area of Large Rectangle:

$A = 7 \cdot 5$

$A = 35\ m^2$

$A = 35 - 10$

$A = 25\ m^2$