


4.3 Extension Worksheet Answers with Work

Name Answers (With work) Date _____ Hour _____

4.3 Extension Worksheet

Find the area of the shaded figure.


1. 

Rectangle
 $A = bh$
 $A = 6 \cdot 4$
 $A = 24$

triangle
 $A = \frac{bh}{2}$
 $A = \frac{6 \cdot 4}{2}$
 $A = 12 \text{ units}^2$

24
 + 12

 36
 Units²

2. 


Same as other trapezoid
 $A = 16 \text{ units}^2$

triangle
 $A = \frac{bh}{2}$
 $A = \frac{2 \cdot 4}{2}$
 $A = 4 \text{ units}^2$

trapezoid
 $A = \frac{h(b_1 + b_2)}{2}$
 $A = \frac{4(6 + 2)}{2}$
 $A = 16 \text{ units}^2$

16
 + 16

 32
 Units²

3. 

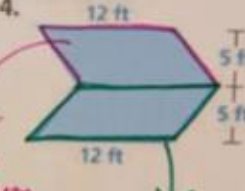
triangle
 $\frac{bh}{2}$
 $\frac{2 \cdot 4}{2}$
 $\frac{4}{2}$
 2

Square
 bh
 $4 \cdot 4$
 16

2
 + 2
 + 16

 20
 Units²

Find the area of the figure.


4. 

Same as green parallelogram
 $A = 60 \text{ units}^2$

parallelogram
 bh
 $12 \cdot 5$
 60 units^2

60
 + 60

 120
 Units²

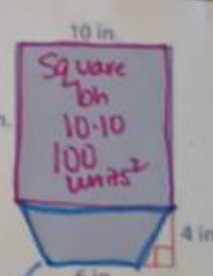
5. 

rectangle
 bh
 $11 \cdot 8$
 88 units^2

triangle
 $\frac{bh}{2}$
 $\frac{11 \cdot 7}{2}$
 38.5 units^2

88
 + 38.5

 126.5
 Units²

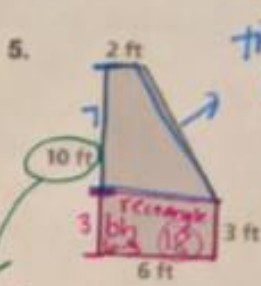
6. 

Square
 bh
 $10 \cdot 10$
 100 units^2

trapezoid
 $\frac{h(b_1 + b_2)}{2}$
 $\frac{4(10 + 6)}{2}$
 32 units^2

100
 + 32

 132
 Units²

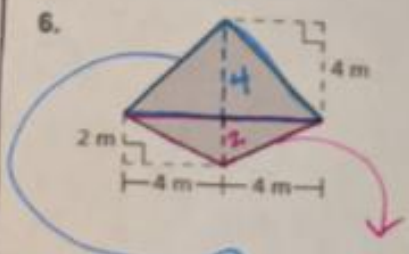


trapezoid
 $\frac{h(b_1+b_2)}{2}$
 $\frac{7(2+6)}{2}$
 28

This is the height of the composite figure, not the trapezoid!!
 Common mistake!

+ 18
 28

 46 Units²



triangle
 $\frac{bh}{2}$
 $\frac{8 \cdot 4}{2}$
 16

triangle
 $\frac{bh}{2}$
 $\frac{8 \cdot 2}{2}$
 8

+ 8
 16

 24 Units²