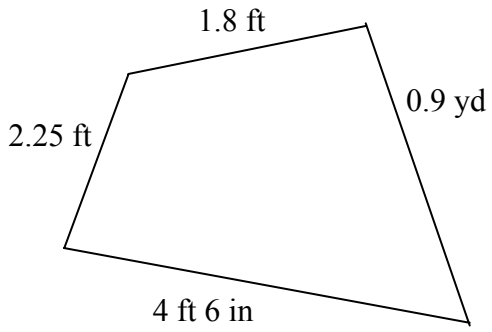
# Math0090 Lab Worksheet #1

Objective: Solve problems #1- #10 involving perimeter and area of geometric figures (Quadrilateral, Parallelograms, Rectangles, Squares, Triangles, Trapezoids and composite figures). #11 through #15 are review problems.

1. Find the perimeter of the following figure.



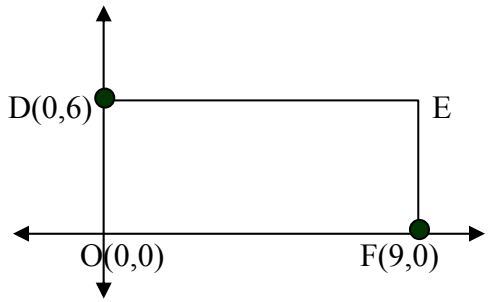

A. 9.45 ft

B. 9.55 ft

C. 11.25 ft

D. 11.35 ft

2. Use the diagram below to answer the question that follows.




Find the perimeter of the rectangle ODEF.

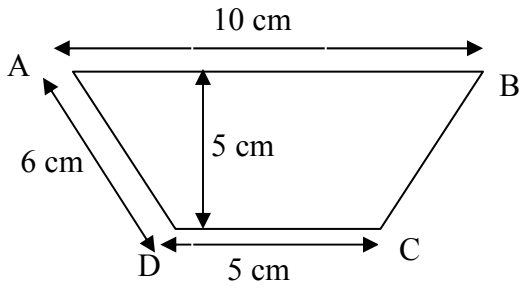
A. 15

B. 30

C. 54

D. 117

3. Use the diagram below to answer the question that follows.




ABCD is an isosceles trapezoid. Find the perimeter of ABCD.

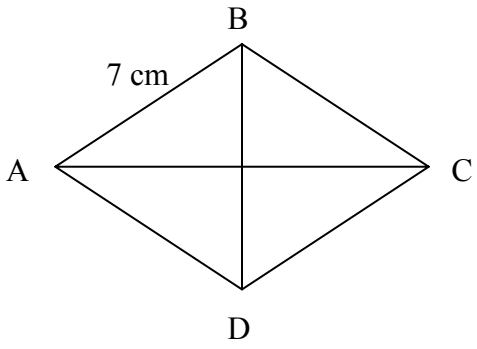
A. 4 cm

B. 27 cm

C. 30 cm

D. 50 cm

4. Use the diagram below to answer the question that follows.




Find the perimeter of the rhombus ABCD.

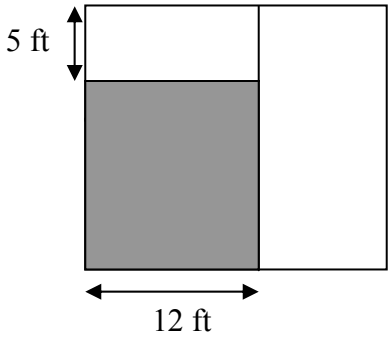
A. 14 cm

B. 28 cm

C. 42 cm

D. 49 cm

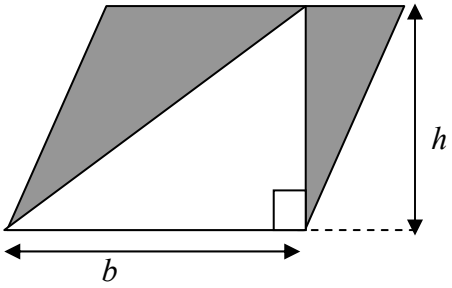
5. Use the diagram below to answer the question that follows.




A square plot of land is partitioned into three rectangular lots. If the area of the land is 400 square feet, what is the area of the shaded lot?

A. 40 square feet
B. 60 square feet
C. 180 square feet
D. 360 square feet

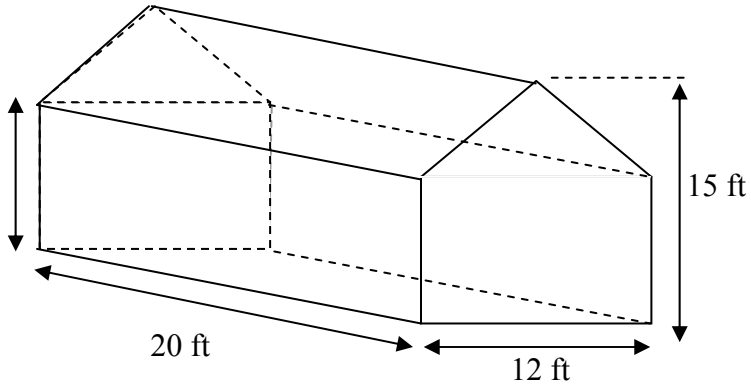
6. Use the diagram below to answer the question that follows.




The area of the parallelogram is 192 square inches, what is the area of the shaded part?

A. 60 square inches
B. 72 square inches
C. 90 square inches
D. 96 square inches

7. Use the diagram below to answer the question that follows.




Maria plans to paint her garage. The garage has a pentagonal front and back, and the sides are rectangular. One gallon of paint costs $16.50 and covers 400 square feet. Assuming that she will needs two coats of paint, how much will Maria have to spend on paint?

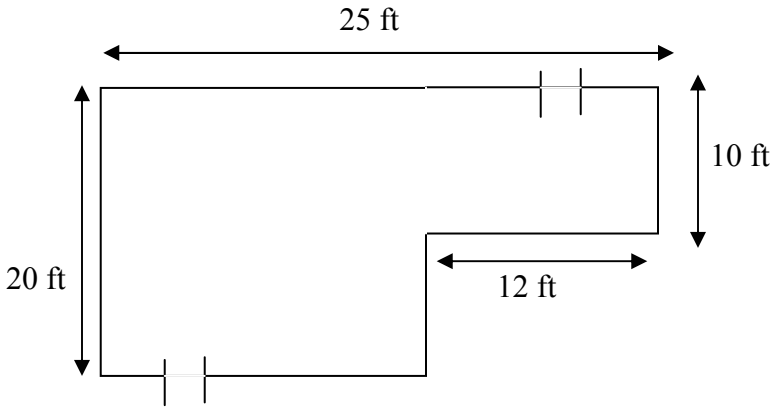
A. $31.00

B. $66.00

C. $66.00

D. $99.00

8. The diagram below is a drawing of Tom's kitchen floor. Tom plans to tile his kitchen floor with 6-inch by 6-inch square ceramic tiles. Each tile costs $3.50. How much will Tom have to spend on the tiles?



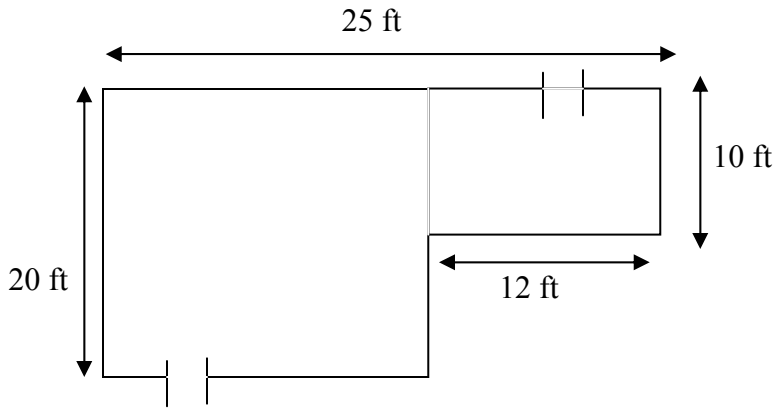

A. $443.33

B. $2660.00

C. $5320.00

D. $8680.00

9. The diagram below is a drawing of Tom's kitchen floor. Tom plans to tile his kitchen floor with 6-inch by 6-inch square ceramic tiles. One can of ceramic glue is enough to tile 5 square yards. Each can costs $7.50. How much will Tom have to spend on the glues?




A. $63.33
B. $67.50
C. $190.00
D. $570.00

10. The diagram in problem number 9 above is a drawing of Tom's kitchen floor. Tom plans to place baseboard around the floor except at the two door openings. Each door is 36 inches wide. The baseboard price is 55¢ per foot. How much will Tom have to spend on the baseboard?

A. $9.90
B. $34.10
C. $46.20
D. $205.70

11. The length of a rectangle is 3 meters more than twice its width. If the perimeter of the rectangle is 90 meters, then the width of the rectangle is

A. 6 m

B. 12 m

C. 14 m

D. 16 m

12. Simplify. $\frac{6m^2+3m}{3m}=$

A. $6\,m^2$

B. $2\,m+1$

C. $2\,m+3$

D. $6m^2+1$

13. Simplify and express the answer in scientific notation. $\frac{3\times10^4+7\times10^4}{(3\times10^4)\bullet(3\times10^4)}=$

A. $1.11\times10^{-4}$

B. $2.33\times10^{0}$

C. $1.11\times10^{4}$

D. $2.33\times10^{12}$

14. Which of the following is a factor of $10x^2-5x-50$?

A. $(2x-25)$

B. $(10x-1)$

C. $(2x-5)$

D. $(x-2)$

15. Multiply. $(7x^2-5)(6x^2+11)$

A. $42x^4-47x^2-55$

B. $42x^4-55$

C. $42x^4+47x^2-55$

D. $42x^4+77x^2-55$