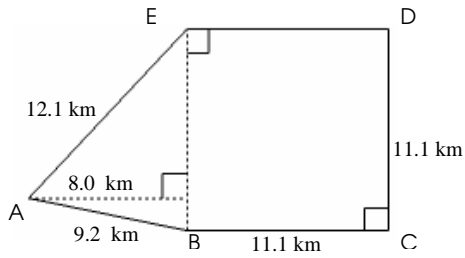


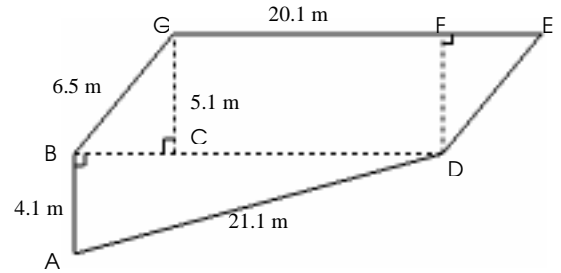
## Area and Perimeter of Compound Shapes (I)

Instructions: Find the area and perimeter of each compound shape.

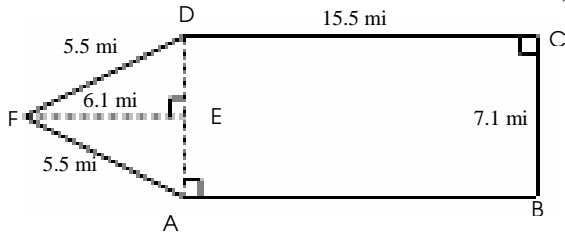
1)



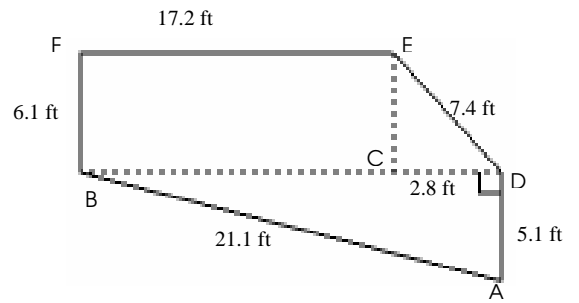
2)



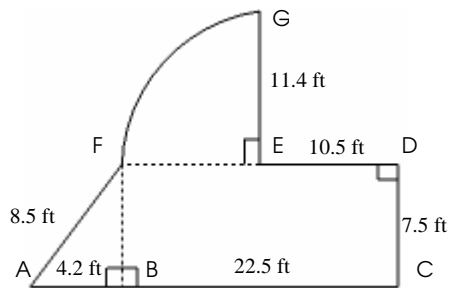
3)



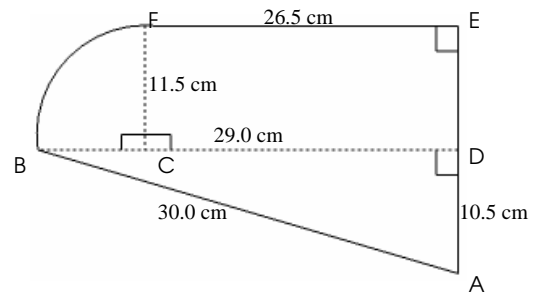
4)



5)



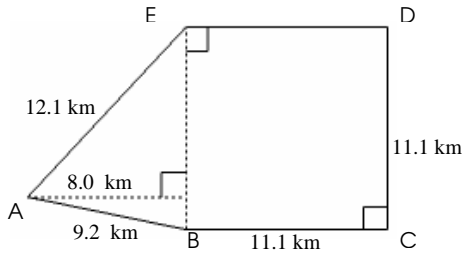
6)



# Area and Perimeter of Compound Shapes Answer (I)

Instructions: Find the area and perimeter of each compound shape.

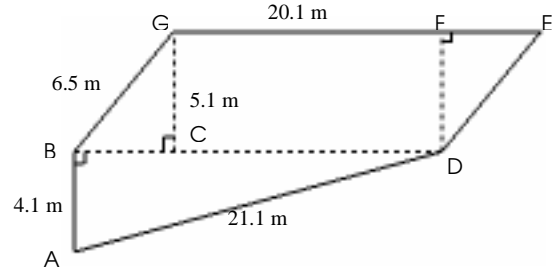
1)



Area = Area of ABE + Area of BCDE  
 $= (0.5 \times AB \times BE) + (CD)^2$   
 $= (0.5 \times 9.2 \times 8.0) + (11.1)^2$   
 $= 167.6 \text{ km}^2$

Perimeter =  $AB + (3 \times CD) + AD$   
 $= 9.2 + (3 \times 11.1) + 12.1$   
 $= 54.6 \text{ km}$

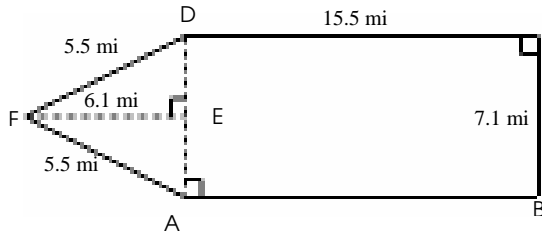
2)



Area = Area of ABD + Area of BDEG  
 $= (0.5 \times AD \times AB) + (CG \times EG)$   
 $= (0.5 \times 20.1 \times 4.1) + (5.1 \times 20.1)$   
 $= 143.7 \text{ m}^2$

Perimeter =  $AB + AD + (2 \times BG) + EG$   
 $= 4.1 + 21.1 + (2 \times 6.5) + 20.1$   
 $= 58.3 \text{ m}$

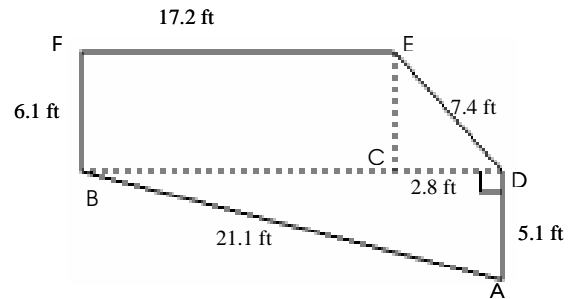
3)



Area = Area of ABCD + Area of ADF  
 $= (BC \times CD) + (0.5 \times BC \times FE)$   
 $= (7.1 \times 15.5) + (0.5 \times 7.1 \times 6.1)$   
 $= 131.7 \text{ mi}^2$

Perimeter =  $(2 \times AB) + BC + (2 \times AF)$   
 $= (2 \times 15.5) + 7.1 + (2 \times 5.5)$   
 $= 49.1 \text{ mi}$

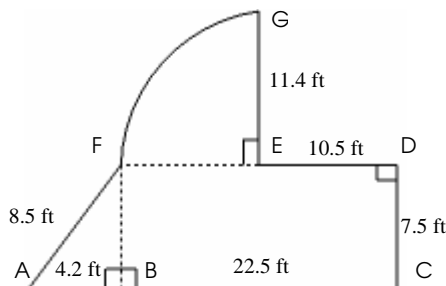
4)



Area = Area of ABD + Area of BDEF  
 $= (0.5 \times AD \times AB) + (0.5 \times (BD + EF) \times CE)$   
 $= (0.5 \times 5.1 \times 21.1) + (0.5 \times (20.0 + 17.2) \times 6.1)$   
 $= 167.3 \text{ ft}^2$

Perimeter =  $AB + AD + ED + EF + FB$   
 $= 21.1 + 5.1 + 7.4 + 17.2 + 6.1$   
 $= 56.9 \text{ ft}$

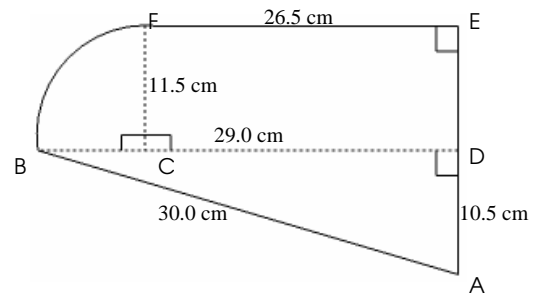
5)



Area = Area of (ABF + BCDF) + Area of Part Circle EFG  
 $= (0.5 \times AB \times BF) + (BC \times CD) + 0.25 \Pi (FE)^2$   
 $= (0.5 \times 4.2 \times 8.5) + (22.5 \times 7.5) + 0.25 \times 3.14 \times (11.4)^2$   
 $= 286.5 \text{ ft}^2$

Perimeter =  $AB + BC + CD + DE + \text{Arc FG} + FA + EG$   
 $= 4.2 + 22.5 + 7.5 + 10.5 + (0.25 \times 3.14 \times 2 \times 11.4) + 8.5 + 11.4$   
 $= 82.5 \text{ ft}$

6)



Area = Area of ABD + CDEF + Area of Part Circle BCF  
 $= (0.5 \times AD \times BD) + (EF \times CF) + 0.25 \Pi (EC)^2$   
 $= (0.5 \times 10.5 \times 29.0) + (26.5 \times 11.5) + 0.25 \times 3.14 \times (11.5)^2$   
 $= 560.8 \text{ cm}^2$

Perimeter =  $BA + AD + ED + EF + \text{Arc BF}$   
 $= 30.0 + 10.5 + 11.5 + 26.5 + (0.25 \times 3.14 \times 2 \times 11.5)$   
 $= 96.6 \text{ cm}$