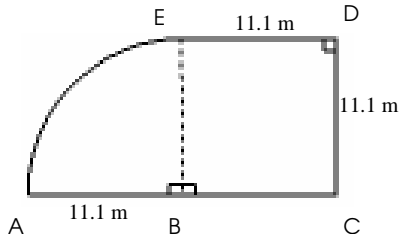


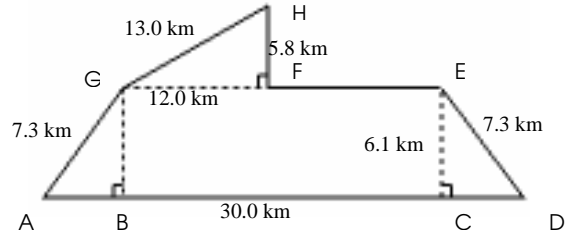
Area and Perimeter of Compound Shapes (J)

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

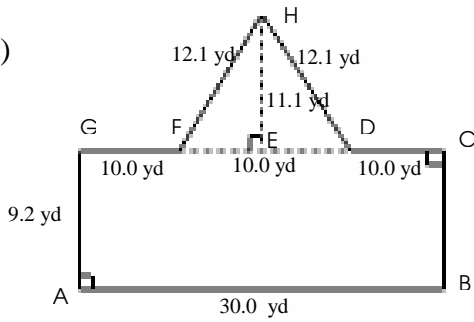
1)



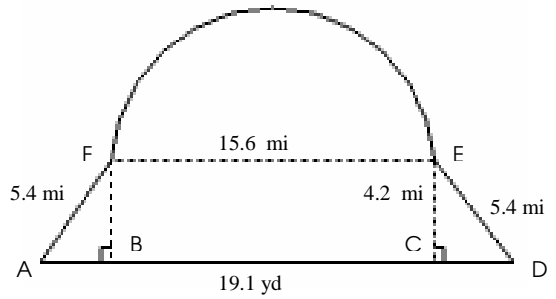
2)



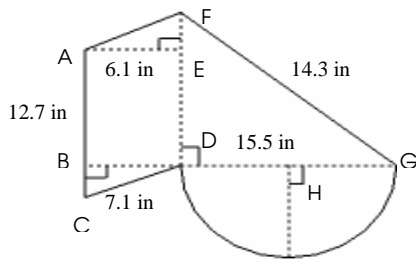
3)



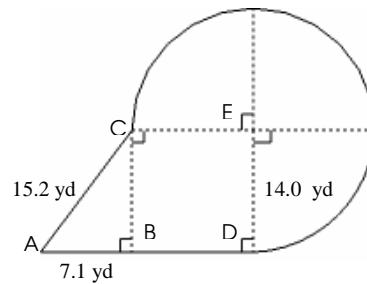
4)



5)



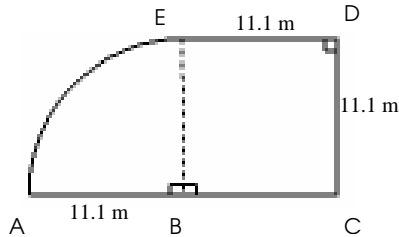
6)



Area and Perimeter of Compound Shapes Answer (J)

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

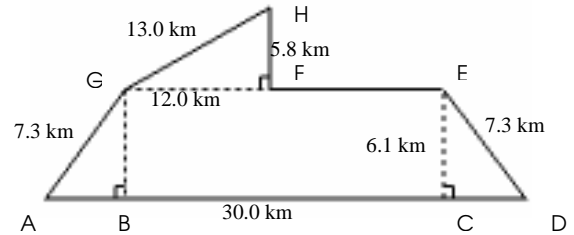
1)



Area = Area of BCDE + Area of Part Circle ABE
 $= (DC)^2 + 0.25 \Pi (EB)^2$
 $= (11.1)^2 + 0.25 \times 3.14 \times (11.1)^2$
 $= 219.9 \text{ m}^2$

Perimeter = $(4 \times CD) + \text{Arc AE}$
 $= (4 \times 11.1) + (0.25 \times 3.14 \times 2 \times 11.1)$
 $= 61.8 \text{ m}$

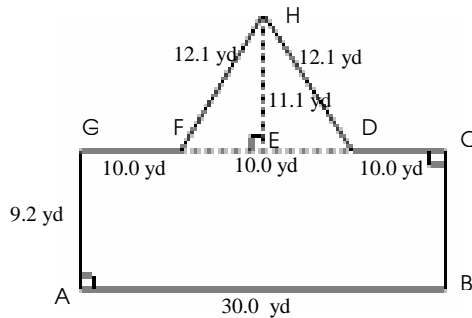
2)



Area = Area of ADEG + Area of FGH
 $= (0.5 \times (AD + EF + FG) \times CE) + (0.5 \times FH \times FG)$
 $= (0.5 \times (30.0 + 13.0 + 12.0) \times 6.1) + (0.5 \times 5.8 \times 12.0)$
 $= 202.6 \text{ km}^2$

Perimeter = $(2 \times AG) + AD + EF + FH + HG$
 $= (2 \times 7.3) + 30.0 + 13.0 + 5.8 + 13.0$
 $= 76.4 \text{ km}$

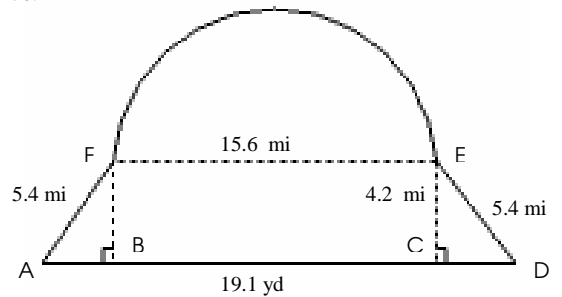
3)



Area = Area of ABCG + Area of FDH
 $= (AD \times AG) + (0.5 \times DF \times EH)$
 $= (30.0 \times 9.2) + (0.5 \times 10.0 \times 11.1)$
 $= 331.5 \text{ yd}^2$

Perimeter = $(2 \times AG) + AB + (2 \times FH) + (2 \times CD)$
 $= (2 \times 9.2) + 30.0 + (2 \times 12.1) + (2 \times 10.0)$
 $= 92.6 \text{ yd}$

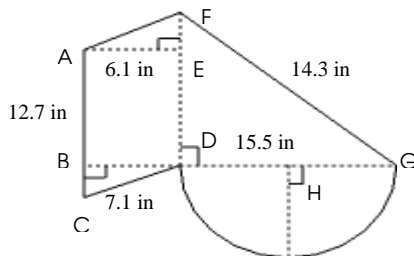
4)



Area = Area of ADEF + Area of Part Circle FE
 $= (0.5 \times (AD + FE) \times CE) + 0.5 \Pi (0.5 FE)^2$
 $= (0.5 \times (19.1 + 15.6) \times 4.2) + 0.5 \times 3.14 \times (0.5 \times 15.6)^2$
 $= 168.4 \text{ mi}^2$

Perimeter = $(2 \times AF) + AD + \text{Arc FE}$
 $= 11.1 + 19.1 + (0.5 \times 3.14 \times 15.6)$
 $= 54.4 \text{ mi}$

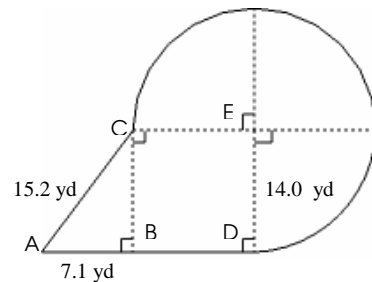
5)



Area = Area of (ACDF + DFG) + Area of Part Circle DHG
 $= (AC \times AE) + (0.5 \times DG \times DF) + 0.5 \Pi (0.5 DG)^2$
 $= (12.7 \times 6.1) + (0.5 \times 15.5 \times 12.7) + 0.5 \times 3.14 \times (0.5 \times 15.5)^2$
 $= 270.2 \text{ in}^2$

Perimeter = Arc DG + FG + $(2 \times AF)$ + AC
 $= (0.5 \times 3.14 \times 15.5) + 14.3 + (2 \times 7.1) + 12.7$
 $= 65.5 \text{ ft}$

6)



Area = Area of (ABD + BCDE) + Area of Part Circle CDE
 $= (0.5 \times AB \times BC) + (ED)^2 + 0.75 \Pi (ED)^2$
 $= (0.5 \times 7.1 \times 14.0) + (14.0)^2 + 0.75 \times 3.14 \times (14.0)^2$
 $= 707.3 \text{ yd}^2$

Perimeter = AB + BD + Arc DE + CA
 $= 7.1 + 14.0 + (0.75 \times 3.14 \times 2 \times 14.0) + 15.2$
 $= 102.2 \text{ yd}$