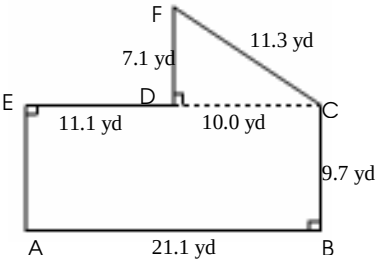
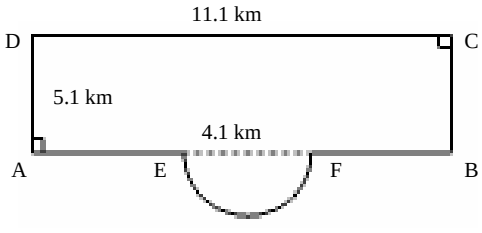
Area and Perimeter of Compound Shapes (F)

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

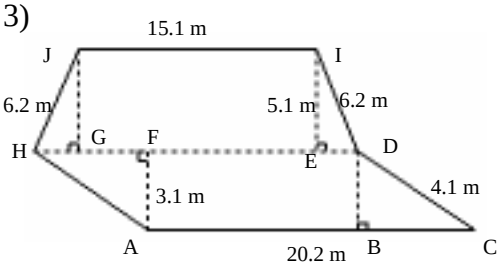
1)



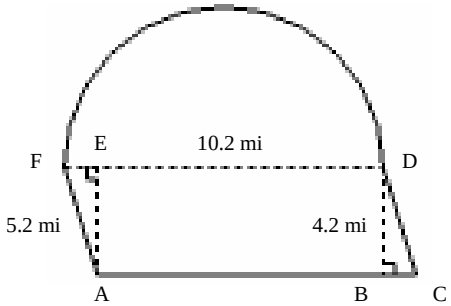
2)



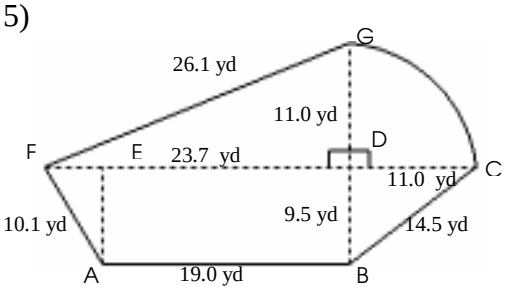
3)



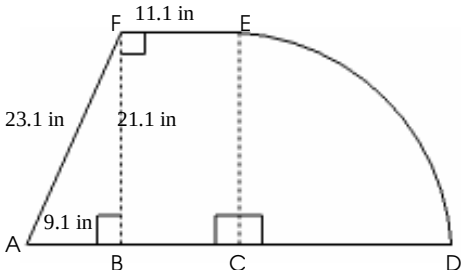
4)



5)



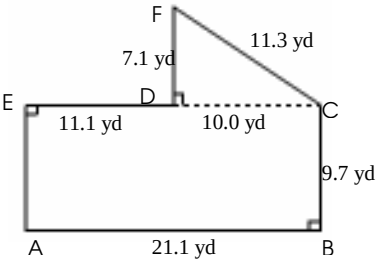
6)



Area and Perimeter of Compound Shapes Answer (F)

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

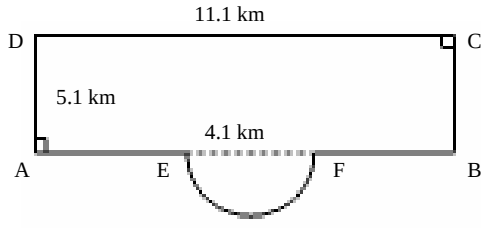
1)



Area = Area of ABCE + Area of CDF
= (AB x BC) + (0.5x CD x FD)
= (21.1 x 9.7) + (0.5x 10.0x 7.1)
= 240.2 yd^2

Perimeter = (2x BC) + AB + CF + FD + DE
= (2x 9.7) + 21.1 + 11.3 + 7.1 +11.1
= 70 yd

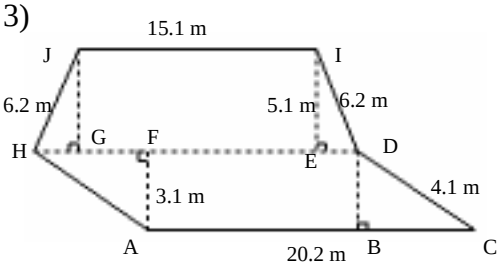
2)



Area = Area of ABCD + Area of Part Circle EF
= (AD x DC) + 0.5 Π $(0.5\ EF)^2$
= (5.1 x 11.1) + 0.5 x 3.14x $(0.5x4.1)^2$
= 63.2 km^2

Perimeter = 2 x(AD+ CD) + Arc EF
= 2 x(5.1+ 11.1) + 0.5x3.14x4.1
= 34.7 km

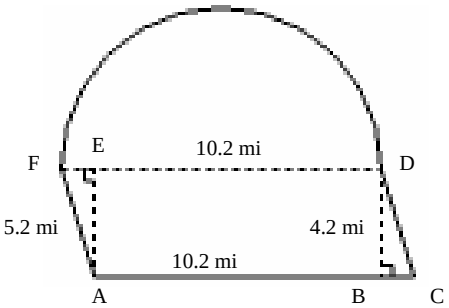
3)



Area = Area of ACDH + Area of HDIJ
= (AF x AC) + 0.5 x (HD+IJ) x EI
= (3.1 x 20.2) + 0.5 x (20.2+15.1) x 5.1
= 152.6 m^2

Perimeter = (2 x AH) + (2 x JH)+ JI+ AC
= (2 x 4.1) + (2 x 6.2) + 15.1 + 20.2
= 55.9 m

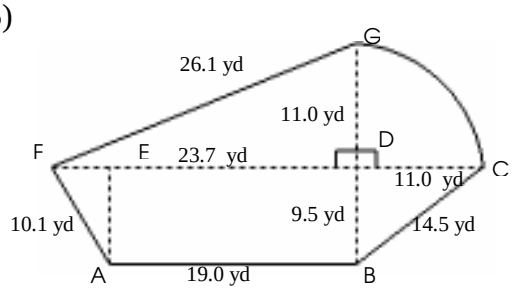
4)



Area = Area of ACDF + Area of Part Circle FD
= (BD x DF) + 0.5 Π $(0.5\ DF)^2$
= (4.2 x 10.2) + 0.5 x 3.14 x $(0.5 \times 10.2)^2$
= 83.7 mi^2

Perimeter = (2 x AF) + DF + Arc DF
= (2 x 5.2) + 10.2 + 0.5 x 3.14 x 10.2
= 36.6 mi

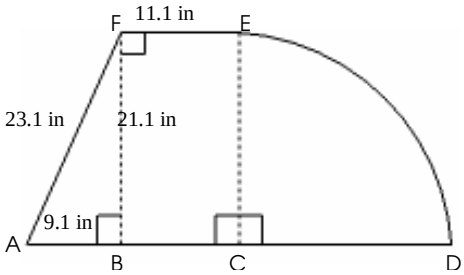
5)



Area = Area of (ABCF+DFG)+Area of Part Circle GDC
= (0.5x(AB+FD+DC)x BD)+
(0.5xFD xDG)+ 0.25 Π $(DG)^2$
= (0.5x(23.7 +19.0+11.0)x 9.5) +
(0.5x 23.7 x 11.0)+ 0.25 Π $(11.0)^2$
= 480.4 yd^2

Perimeter = AB + BC + Arc CG + GF + FA
= 19.1 + 14.2+0.25x3.14x2x11.0 + 26.1 + 10.1
= 86.7 yd

6)



Area = Area of ABF + Area of BCEF + Area of Part Circle DCE
= (0.5x AB x BF) +(BC x BF) + 0.25 Π $(BC)^2$
= (0.5x 9.1 x 21.1) + (11.1 x 21.1) + 0.25 x 3.14 $(21.1)^2$
= 679.7 in^2

Perimeter = AB + (2x BC) +Arc DE + AF
= 9.1 + (2x11.1)+ 0.25x3.14x2x21.1+ 23.1
= 87.5 in