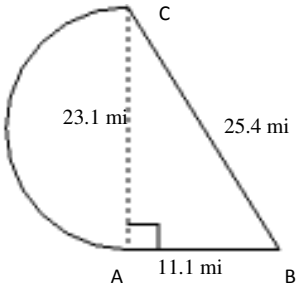
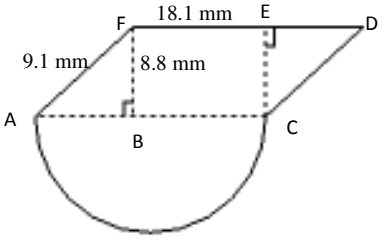
Area and Perimeter of Compound Shapes (E)

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

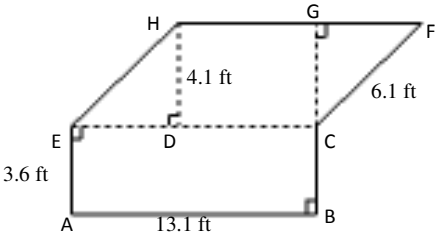
1)



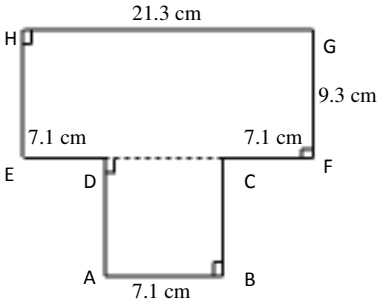
2)



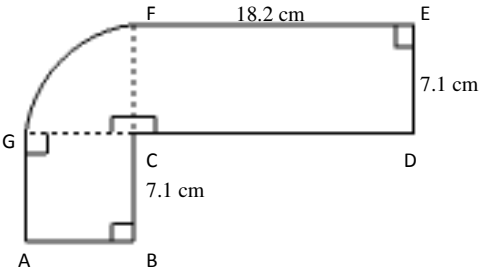
3)



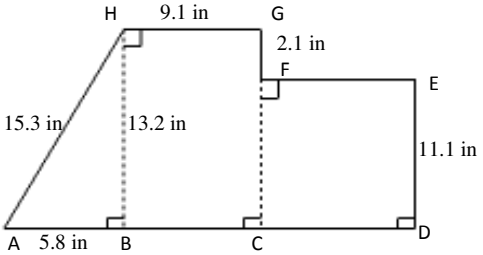
4)



5)



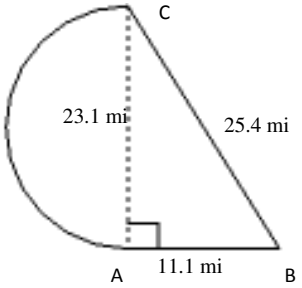
6)



Area and Perimeter of Compound Shapes Answer (E)

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

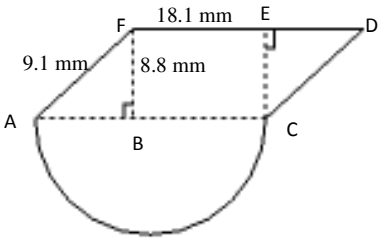
1)



Area = Area of ABC + Area of Part Circle AC
= (0.5x AB x BC) + 0.5 Π (0.5 AC)^2
= (0.5x23.1 x 11.1) + 0.5 x 3.14 (0.5x23.1)^2
= 337.6 mi^2

Perimeter = AB +BC+ Arc BC
= 11.1 +25.4+ 0.5x3.14x23.1
= 72.8 mi

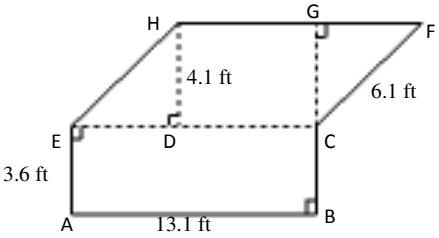
2)



Area = Area of ACDF + Area of Part Circle ABC
= (FD x BF) + 0.5 Π (0.5 AC)^2
= (18.1 x 8.8) + 0.5 x 3.14x (0.5x18.1)^2
= 287.9 mm^2

Perimeter = Arc AC + (2x CD) + FD
= 0.5x3.14x18.3 + (2 x 9.1) +18.1
= 65.0 mm

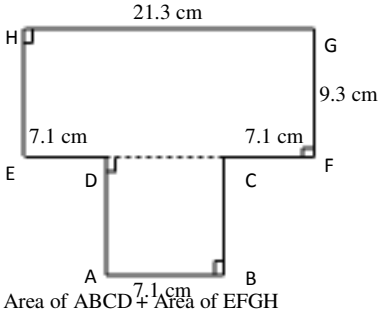
3)



Area = Area of ABCE + Area of ECFH
= (AB x BC) + (EC x FH)
= (13.1 x 3.6) + (13.1 x 4.1)
= 100.9 ft^2

Perimeter = (2x AB) + (2xAE)+ (2x CF)
= (2x 13.1) + (2x36)+ (2x 6.1)
= 110.4 ft

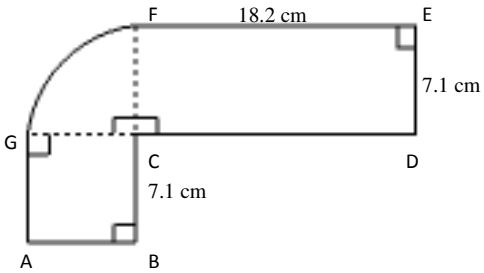
4)



Area = Area of ABCD + Area of EFGH
= (AB)^2 +(HG x FG)
= (7.1)^2 +(21.3 x 9.3)
= 248.5 cm^2

Perimeter = (5x AB) + (2x FG) + GH
= (5x 7.1) + (2x 9.3) + 21.3
= 75.4 cm

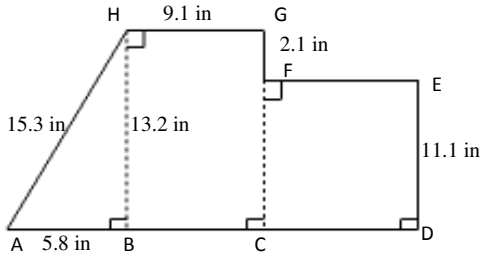
5)



Area = rea of (ABCG +CDEF)+Area of Part Circle CFG
= (BC)^2+(FEx DE) + 0.25 Π (ED)^2
= (7.1)^2+(18.2x 7.1) + 0.25 Π (7.1)^2
= 219.2 cm^2

Perimeter = (4x AB) + Arc BC + (2x FE)
= (4x 7.1)+ 0.25x3.14x2x7.1+ (2x 18.2)
= 75.9 cm

6)



Area = Area of ABH + Area of BCGH + Area of CDEF
= (0.5x AB x BH)+(GH x BH) + (ED)^2
= (0.5x5.8 x 13.2)+(9.1 x 13.2) + (11.1)^2
= 281.6 in^2

Perimeter = AB + (2x GH) + (3x DE) + GF
= 5.8 + (2x 9.1) + (3x 11.1) + 2.1
= 59.4 in