

GEOMETRY (SECTION 11.1)

7. Vertices: A, B, C, D, E, F, G, H
(8)

Edges: $\overline{AB}, \overline{AE}, \overline{AD}, \overline{BC}, \overline{BF},$
(12) $\overline{CD}, \overline{CG}, \overline{DH}, \overline{EF}, \overline{EH},$
 $\overline{FG}, \overline{GH}$

Faces: ABCD, ABFE, BFGC, ADHE,
(6) DCGH, EFGH

9. Edges: 15

Vertices: 9

Faces: (8)

$$9 + F = 15 + 2$$

$$F = 8$$

11. Faces: 20

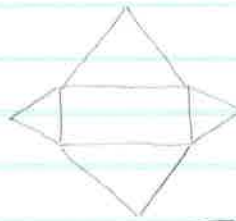
Edges: 30

Vertices: (12)

$$20 + V = 30 + 2$$

$$V = 12$$

13.

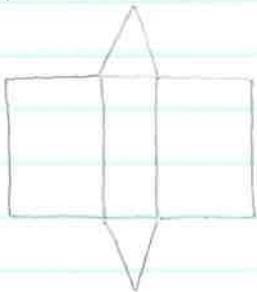


$$5 + V = 8 + 2$$

$$V = 5$$

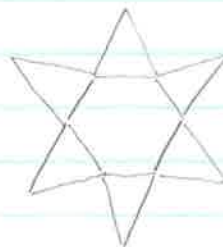
15. $6 + 5 = 9 + 2$

$$11 = 11 \checkmark$$



17. $7 + 7 = 14 + 2$

$$14 = 14 \checkmark$$



19. Triangle

38. (A) Icosahedron

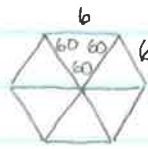
(B) Octahedron

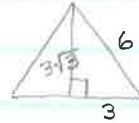
(C) Tetrahedron

(D) Hexahedron

(E) Dodecahedron

51. $4 + F = 6 + 2$
 $F = 4$ (B)

53. 
 $(6-2)180 = \frac{720}{6} = 120$



$$\begin{aligned} \text{Area} &= \left(\frac{1}{2}(6)(3\sqrt{3})\right)(6) \\ &= 3(3\sqrt{3})(6) \\ &= 18(3\sqrt{3}) \\ &= 54\sqrt{3} \text{ m}^2 \text{ D} \end{aligned}$$