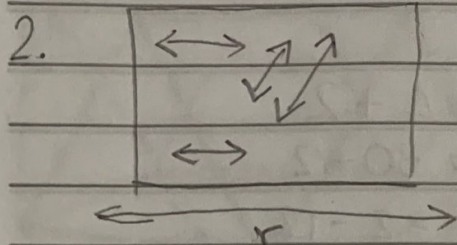
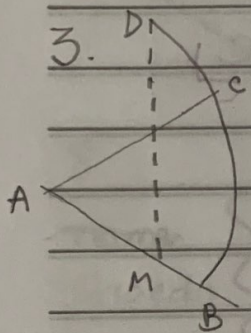


1. AB, AC e AD = reversos

R: C



R: B



$$BD = l/2$$

$$BM = l\sqrt{3}/2$$

$$BM = h \triangle ABC$$

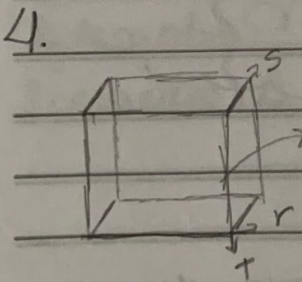
$$\tan \hat{M}DB = BM/BD$$

$$\tan \hat{M}DB = \frac{l\sqrt{3}}{2}$$

$$\tan \hat{M}DB = \sqrt{3}$$

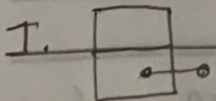
$$\hat{M}DB = 60^\circ$$

R: C



4. reta suporta uma das arestas do cubo.

5.



F

II. V

III. V

R: C

$$1. V = 6$$

$$F = 8$$

$$A = ?$$

$$V + F = A + 2$$

$$6 + 8 = A + 2$$

$$14 = A + 2$$

$$14 - 2 = A$$

$$12 = A \quad \text{[R: C]}$$

2.

$$F = 12$$

$$A = ?$$

$$V = ?$$

Pentágono = 5L

$$A = F \cdot \text{lados} / 2$$

$$A = 6 \cdot 5 = 30$$

$$V + F = A + 2$$

$$V + 12 = 30 + 2$$

$$V = 32 - 12$$

$$V = 20$$

$$\text{[R: C]}$$

3.

$F = 6$ quadriláteros + 8 triângulos

$$F = 14$$

$$A = ?$$

$$V = ?$$

$$A_q = 6 \cdot 4 / 2$$

$$A_q = 6 \cdot 2$$

$$A_q = 12$$

$$A_\Delta = 8 \cdot 3 / 2$$

$$A_\Delta = 4 \cdot 3$$

$$A_\Delta = 12$$

$$A = A_q + A_\Delta$$

$$A = 12 + 12$$

$$A = 24$$

$$V + F = A + 2$$

$$V + 14 = 24 + 2$$

$$V = 26 - 14$$

$$V = 12$$

8

5.

Poliedro de platão:

• As faces tem o mesmo número de lados

$$4 \cdot 5 = 1800^\circ$$

$$S = 360 \cdot (V - 2)$$

$$1800^\circ = 360(V - 2)$$

$$1800^\circ = 360V - 720$$

$$1800^\circ + 720 = 360V$$

$$V = 2520 / 360$$

$$V = 7$$

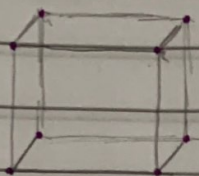
$$\text{[R: D]}$$

• Nos vértices ocorrem o mesmo número de arestas.

• A relação de Euler = $V - A + F = 2$

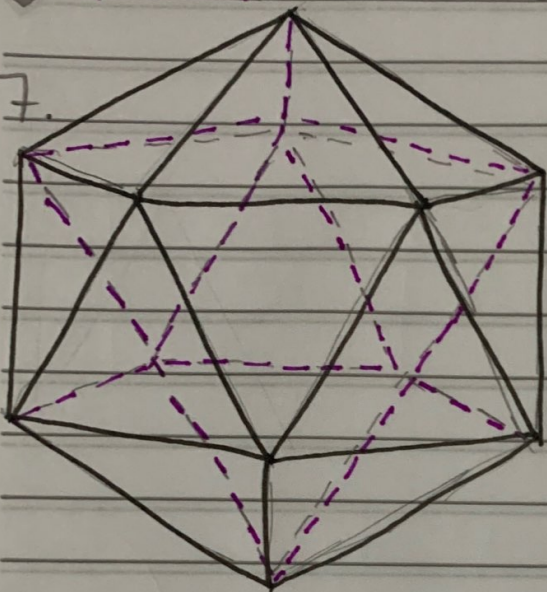


6.



6 faces quadradas
8 vértices
12 arestas

7.



20 faces
12 vértices
30 arestas

8

nome	tipo de face	nº de Faces	A	V
tetraedro	Δ equilátero	4	6	4
Hexaedro	\square quadrados	6	12	8
Octaedro	Δ equilátero	8	12	6
Dodecaedro	\square regular	12	30	20
Icosaedro	Δ equilátero	20	30	12