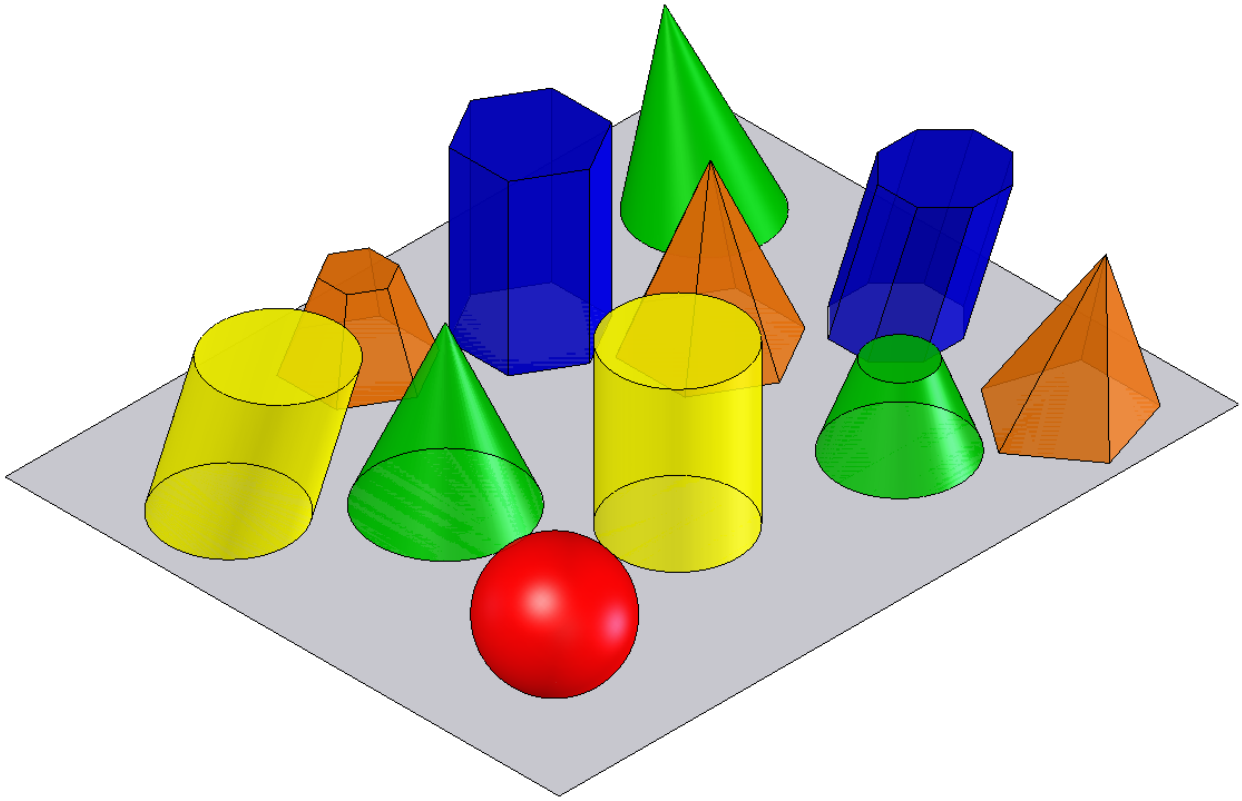
Ag Samhaltú Solad



Eolas Réamhriachtanach D'fhonn an ceacht seo a dhéanamh, beidh ort a bheith taithíoch ar na príomhorduithe seo a leanas;

- **Sketch (Line, Rectangle, Smart Dimension, Text)**
- **Extruded Boss/Base**
- **Revolve**

Aidhm an Cheachta Ar chríochnú an cheachta seo duit, beidh tú ábalta:

Dronphriosmaí, Sorcóirí, Pirimidí agus Cóin samhaltaithe agat
Plánaí seach-churtha a chur isteach
Fiarphriosmaí, Sorcóirí, Pirimidí agus Cóin a shamhaltú ag úsáid Loft Edited Colour.

Orduithe Úsáidte **Sketch (Line, Rectangle, Circle, Add Relation, Smart Dimension), Offset Plane, Extrude Boss/Base, Revolve, Loft**

Cruthaigh Fillteán Nua

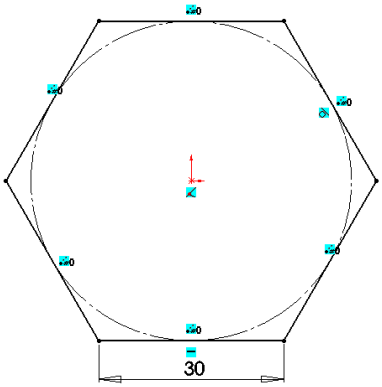
Cruthaigh filltéan nua dar teideal ‘Solaid’ i do shuíomhanna roghnaithe.

Ag Cruthú Solad le Extrude Boss/Base

Féadtar priosmaí agus sorcóirí a chruthú trí easbhrú a dhéanamh ar a sceitse próifíleach.

Ag Cruthú Priosma

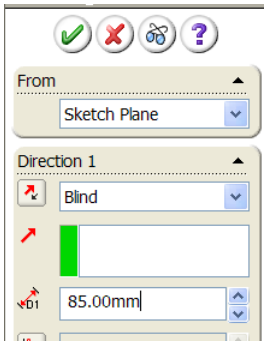
Oscail comhad píosa nua. Roghnaigh **File, Save as** ar an gnáthbharra uirlisí. Sábháil an píosa mar ‘Priosma’ i do chomhad dar teideal “Solaid’.



D’fhonn priosma le bonn heicseagánach a chruthú , mar shampla, ní mór an heicseagán (**Polygon)** a sceitseáil ar phlána roghnaithe.

Sceitseáil heicseagsan ar an **Top Plane**.

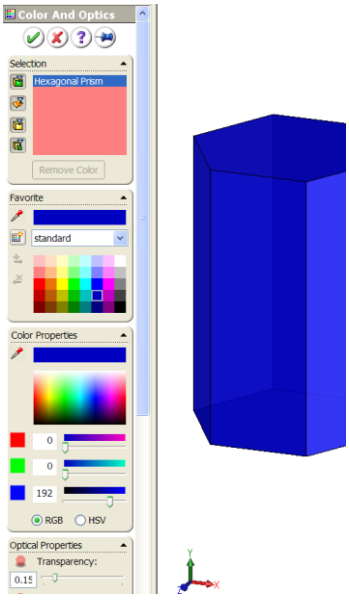
Cuir leis an gaol agus na toisí atá léirithe. Deimhnigh an sceitse.



Roghnaigh **Extrude Boss/Base** ón Features Manager.

Easbhrúigh an sceitse ar fhad 85mm agus deimhnigh é.

Athainmnigh an píosa mar ‘Priosma Heicseagánach’.



Cuir dath leis an bpíosa ón **‘Color and Optics’** property manager.

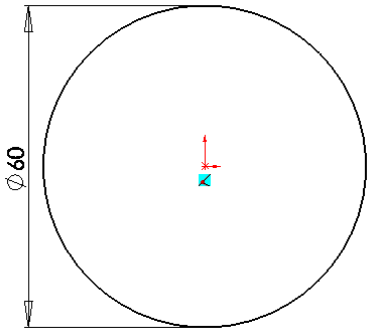
Sábháil an píosa.

Féadtar gach cineál dronphriosma a chruthú ar an mbealach seo.

Ag Cruthú Dronshorcóra

Féadtar dronshorcóir a chruthú sa bhealach céanna a cruthaíodh priosma.

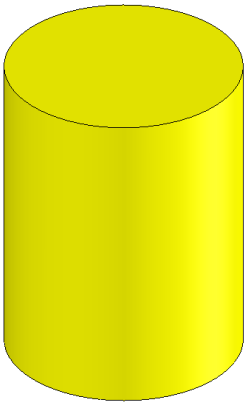
Oscail comhad píosa nua. Roghnaigh **File, Save as** ar an gnáthbharra uirlisí. Sábháil an píosa mar 'Sorcóir - easbhrúigh' i do chomhad dar teideal 'Solaid'.



Sceitseáil ciorcal ar an **Top Plane** lena lár ag an **Origin**.

Cuir leis an toise atá léirithe. Deimhnigh an sceitse..

Roghnaigh **Extrude Boss/Base** ón Features Manager.



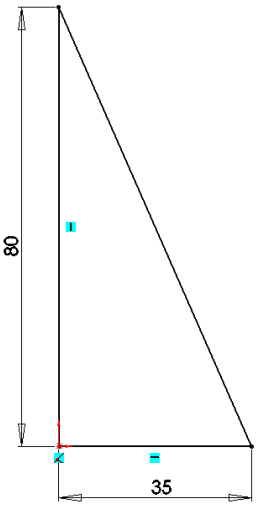
Easbhrúigh an sceitse ar fhad 80mm agus deimhnigh é.
Athainmnigh an píosa mar 'Sorcóir'.

Cuir dath leis an bpíosa ón **'Color and Optics'** property manager.

Sábháil an píosa.

Ag Cruthú Solad le Revolved Boss/Base

Féadtar cóin, sféir agus sorcóirí a chuthú trí rothlú a dhéanamh ar a bpróifilí thart ar an ais.

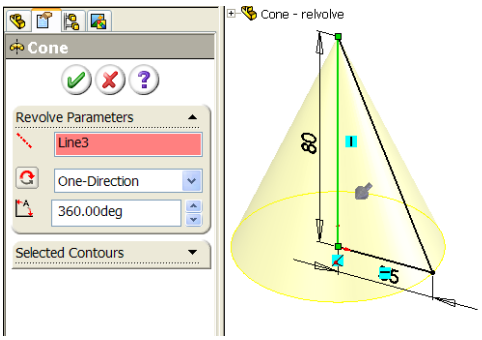


Ag Cruthú Cóin

Oscail comhad píosa nua. Roghnaigh **File, Save as** ar an gnáthbharra uirlisí. Sábháil an píosa mar 'Cón - rothlú' i do chomhad dar teideal 'Solaid'.

Sceitseáil triantán dronuilleach ar an **Front Plane** leis an right angle ag an**Origin**.

Cuir leis na toisí atá léirithe. Deimhnigh an sceitse.



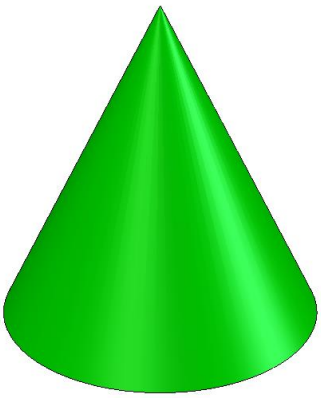
Roghnaigh **Revolve Boss/Base** ón Features Manager.

Roghnaigh an líne ingearach mar an ais.
Rothlaíonn an phróifíl 360 mar réamhshocrú
Deimhnigh é d'fhonn an píosa a chruthú

.

Athainmnigh an píosa mar‘Cón’.

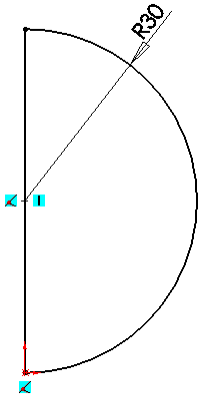
Cuir dath leis an bpíosa ón **‘Color and Optics’** property manager.



Sábháil an píosa.

Ag Cruthú Sféir

Oscail comhad píosa nua. Roghnaigh **File, Save as** ar an gnáthbharra uirlisí. Sábháil an píosa mar ‘Sféar’ i do chomhad dar teideal ‘Solaid’.

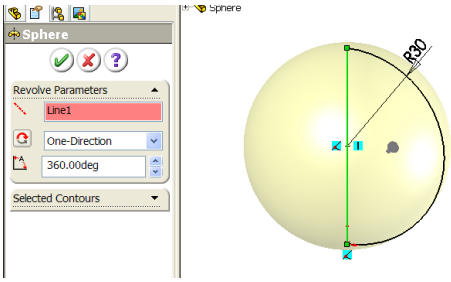


Sceitseáil leathchiorcal ar an **Front Plane** trí úsáid an orduithe sceitse **Line.** Féach chuige go bhfuil ceann amháin den lárlíne ag an **Origin**.

Cuir leis an toise atá léirithe. Deimhnigh an sceitse.

Roghnaigh **Revolve Boss/Base** ón Features Manager.

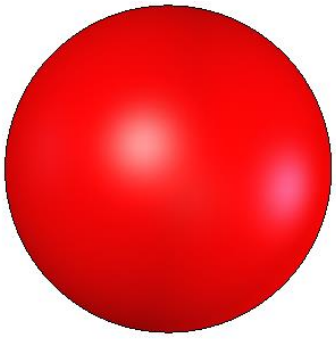
Roghnaigh an lárlíne mar an ais. Rothlaíonn an píosa 360 mar réamhshocrú.



Deimhnigh é d’fhonn an píosa a chruthú .

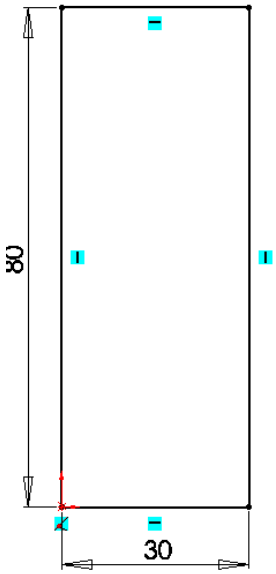
Athainmnigh an píosa mar‘Sféar’.

Cuir dath leis an bpíosa ón **‘Color and Optics’** property manager.
Sábháil an píosa.



Ag Cruthú Sorcóra

Féadtar sorcóir a chruthú trí rothlú mar aon le heasbhrú a dhéanamh.



Oscail comhad píosa nua. Roghnaigh **File, Save as** ar an gnáthbharra uirlisí. Sábháil an píosa mar 'Cylinder - revolve' i do chomhad dar teideal 'Solaid'

Sceitseáil dronuilleog ar an **Front Plane** le rinn amháin ag an lár ag an **Origin.**

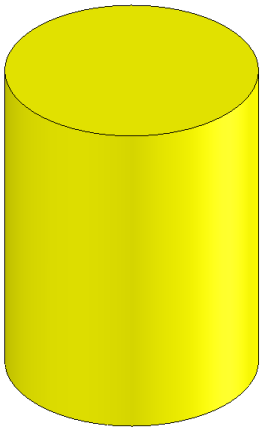
Cuir leis na toisí atá léirithe. Deimhnigh an sceitse

Roghnaigh **Revolve Boss/Base** ón Features Manager.

Roghnaigh an líne ingearach ag an **Origin** mar an ais. Rothlaíonn an phróifíl 360° mar réamhshocrú.

Deimhnigh d'fhonn an píosa a chruthú.

Athainmnigh an píosa mar 'Sorcóir'.



Cuir dath leis an bpíosa ón **'Color and Optics'** property manager.

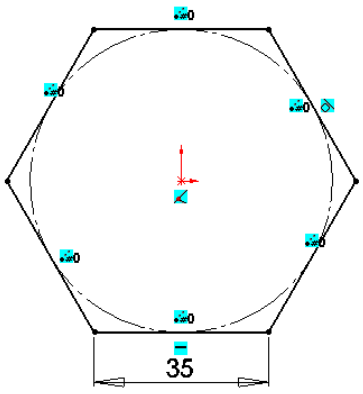
Sábháil an píosa.

Ag Cruthú Solad le Lofted Boss/Base

Cruthaíonn **Lofted Boss/Base** píosa trí aistrithe a dhéanamh idir próifilí. Cruthaíonn túsa ***loft*** trí dhá phróifíl nó tuilleadh acu a úsáid. Ní fheidhmíonn ach an chéad phróifíl, an phróifíl deireanach nó an dá cheann araon mar phointí.
Féadtar na solaid bhunúsacha go léir a chruthú leis an uirlis Loft, cé go bhfuil sé fíor-úsáid ag cruthú pirimidí.

Ag Cruthú Pirimide

Oscail comhad píosa nua. Roghnaigh **File, Save as** ar an gnáthbharra uirlisí. Sábháil an píosa mar 'Pirimid' i do chomhad dar teideal 'Solaid'

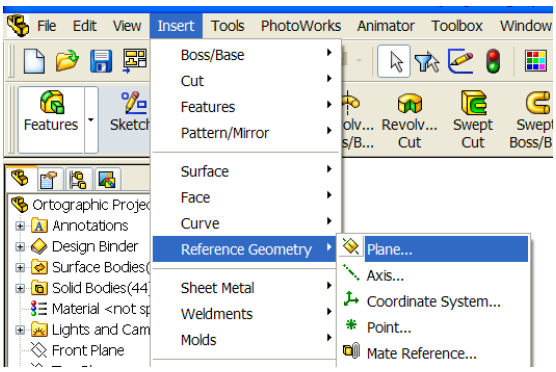


D'fhonn pirimid le bonn heicseagánach a chruthú, mar shampla, ní mór heicseagán a sceitseáil ar phlána roghnaithe.
Sceitseáil heicseagán ar an **Top Plane** leis an ordú **Polygon**.

Cuir leis an gaol agus an toise atá léirithe. Deimhnigh an sceitse.

Ag Cruthú Plána Seach-Churtha
Ní mór buaic (**Point**) na pirimide a shúiomh i sceitse tánaisteach ar phlána eile. Sa sampla seo, d'fhéadfaimis an **Front Plane** a úsáid d'fhonn an bhuaic a shuíomh toisc go bhfuil an lár ar an heicseagán ag an **Origin.** I roinnt chásanna, áfach, beidh orainn plána nua a chruthú chun an bhuaic a sceitseáil. Seo thíos na céimeanna a ghabhann le cruthú Phlána Seach-Churtha.

On Gnáthbharra Uirlisí roghnaigh **Insert / Reference Geometry / Plane**



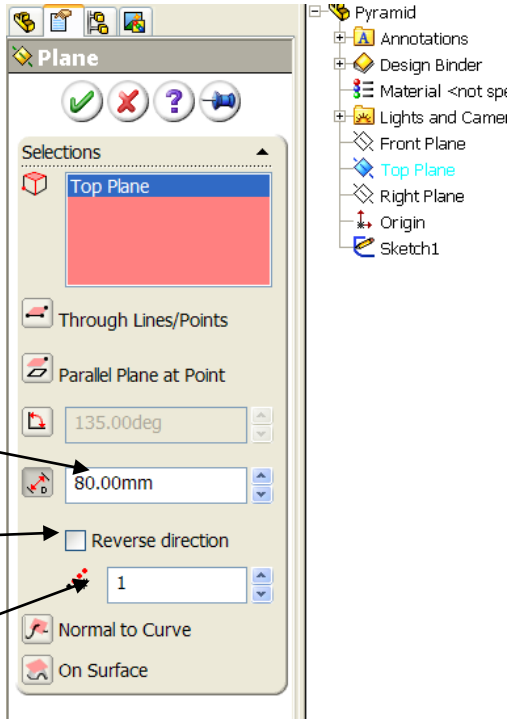
Is mian linn plána a chruthú atá seach-churtha 80mm ón **Top Plane** (Plána Cothrománach).

Roghnaigh an **Top Plane** ón Design Tree (Crann Deartha).

Cuir isteach 80mm le haghaidh fad an tseach-chuir.

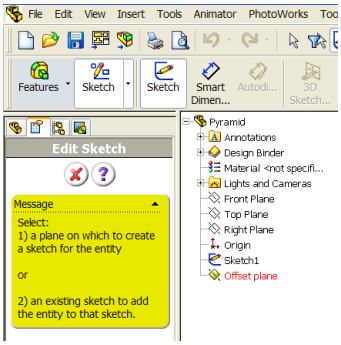
Is féidir an treo a chasadh ar ais trí sheiceáil sa bhosca.

Is í uimhir réamhshocruithe na bplánaí atá le cur isteach ná 1. Féadtar é seo a mhéadú más gá..



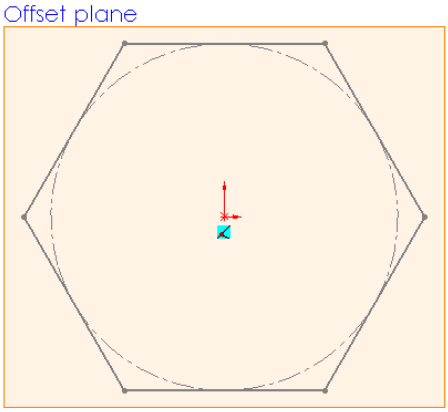
Deimhnigh d'fhonn an plána a chruthú. Athainmnigh an plána mar 'Plána Seach-Churtha'.

Roghnaigh an ‘Plána Seach-Churtha’ d’fhonn an sceitse tánaisteach a chruthú



Cuir cló normálta leis an bplána seo.

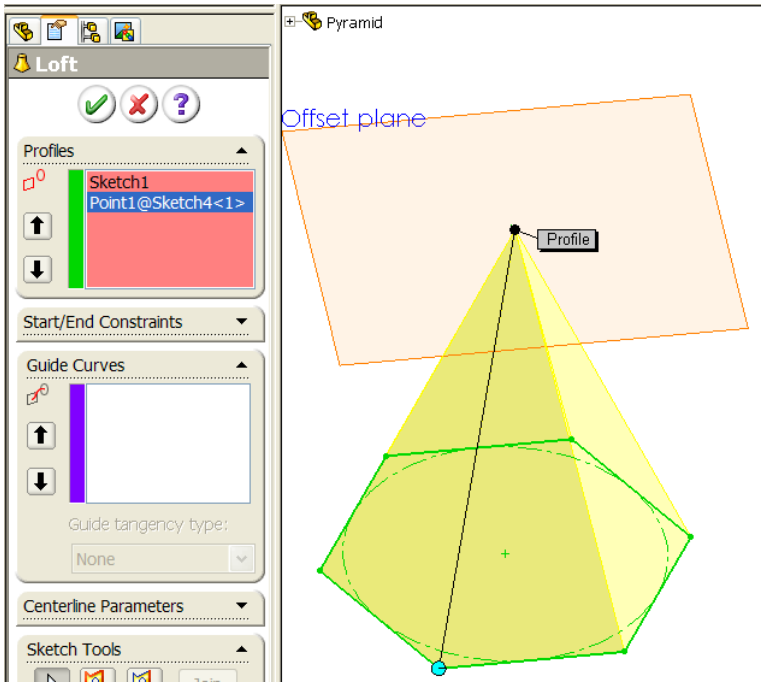
Sceitseáil **Point** a chomhthiteann ar an **Origin**



Deimhnigh an sceitse.

Roghnaigh

ón mbarra uirlisí *Features*. Roghnaigh an bonn heicseagánach agus an pointe mar Phróifilí.



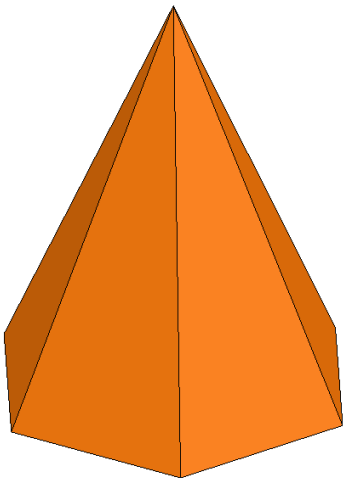
Deimhnigh d’fhonn an píosa a chruthú.

Athainmnigh an píosa mar ‘Pirimid’.

Cuir dath leis an bpíosa ón **‘Color and Optics’** property manager.

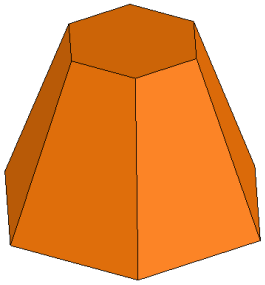
.

Sábháil an píosa.

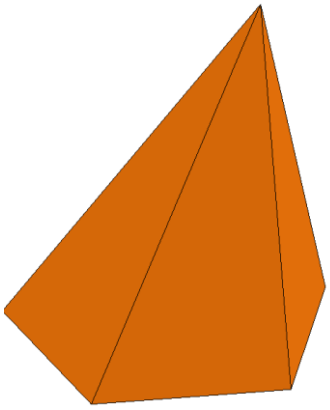


Ag Cruthú Solad Eile
le Lofted Boss/Base Cruthaíodh na samplaí seo a leanas le **Lofted Boss/Base**

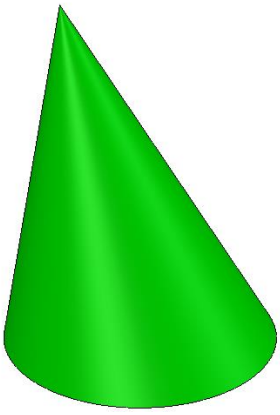
Frustam Cóin (cruthaithe chomh maith le **Revolved Boss/Base)**



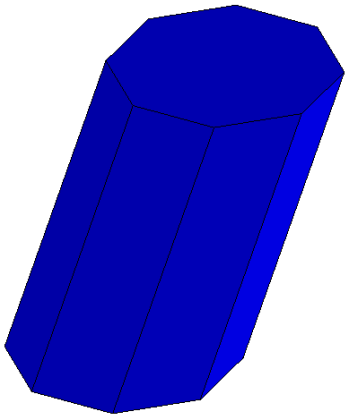
Pirimid Maol



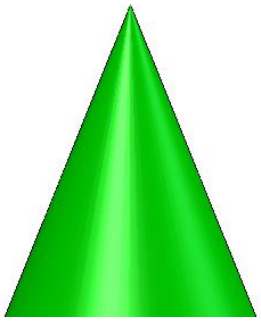
Fiarphirimid



Fiarchón



Fiarphriosmaí



Dronsholad uilig; Cóin san áireamh.