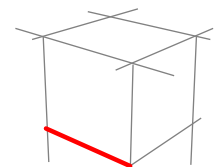
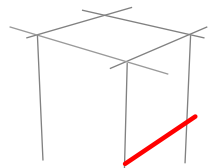
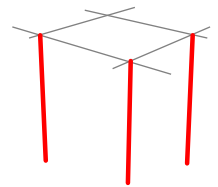


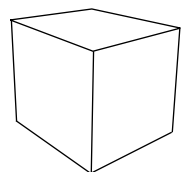
GIVEN



PENCIL



FINELINER



1

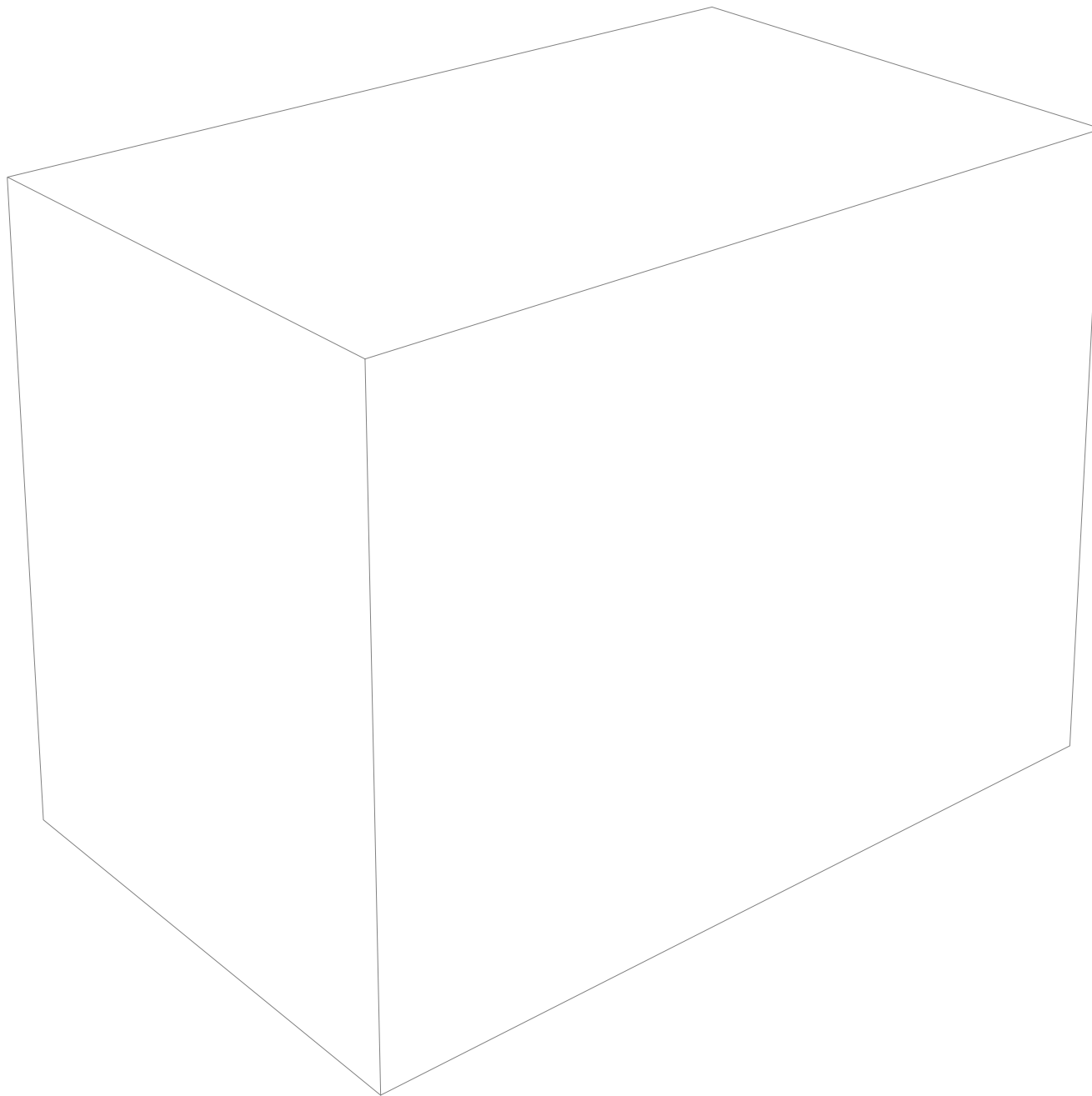
BASIC CUBE

B

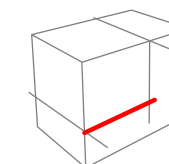
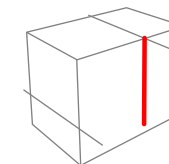
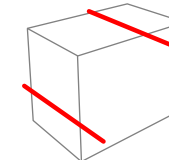
VP3

www.vp3.com.au

Rectangular prisms are the basis for drawing most objects. Learn how to draw a cube and you have made the first step in drawing just about anything else.



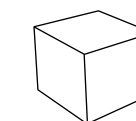
PENCIL



CHECK

Do you have a cube?
Are all edges about the same length?
If not re-do the exercise checking the proportions.

FINELINER



THEORY

If you make a mistake in pencil, don't rub it out, just continue to draw the correct line. Pencil lines are only construction lines.

2

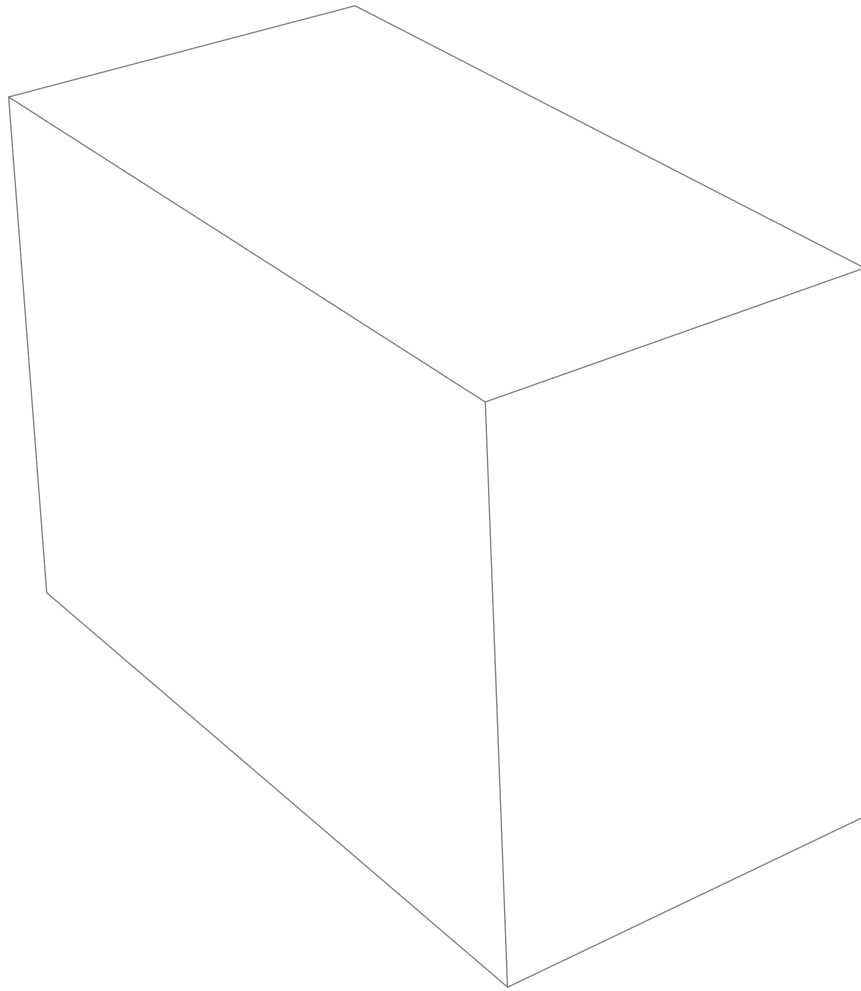
TRUNCATE TO CUBE

Rectangular prisms are the basis for drawing most objects. Start with a prism of the correct proportions. You may need to modify your first attempt.

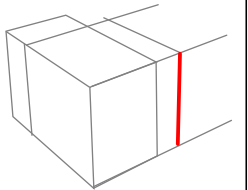
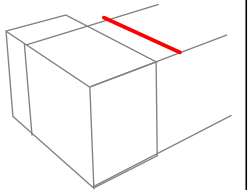
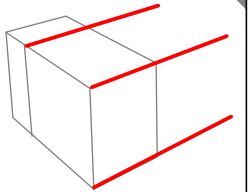
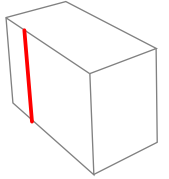
B

VP3

www.vp3.com.au



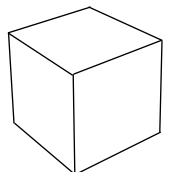
PENCIL



CHECK

Do you have a cube?
Do all edges appear
about the same
length? If not re-do
the exercise checking
the proportions.

FINELINER



3

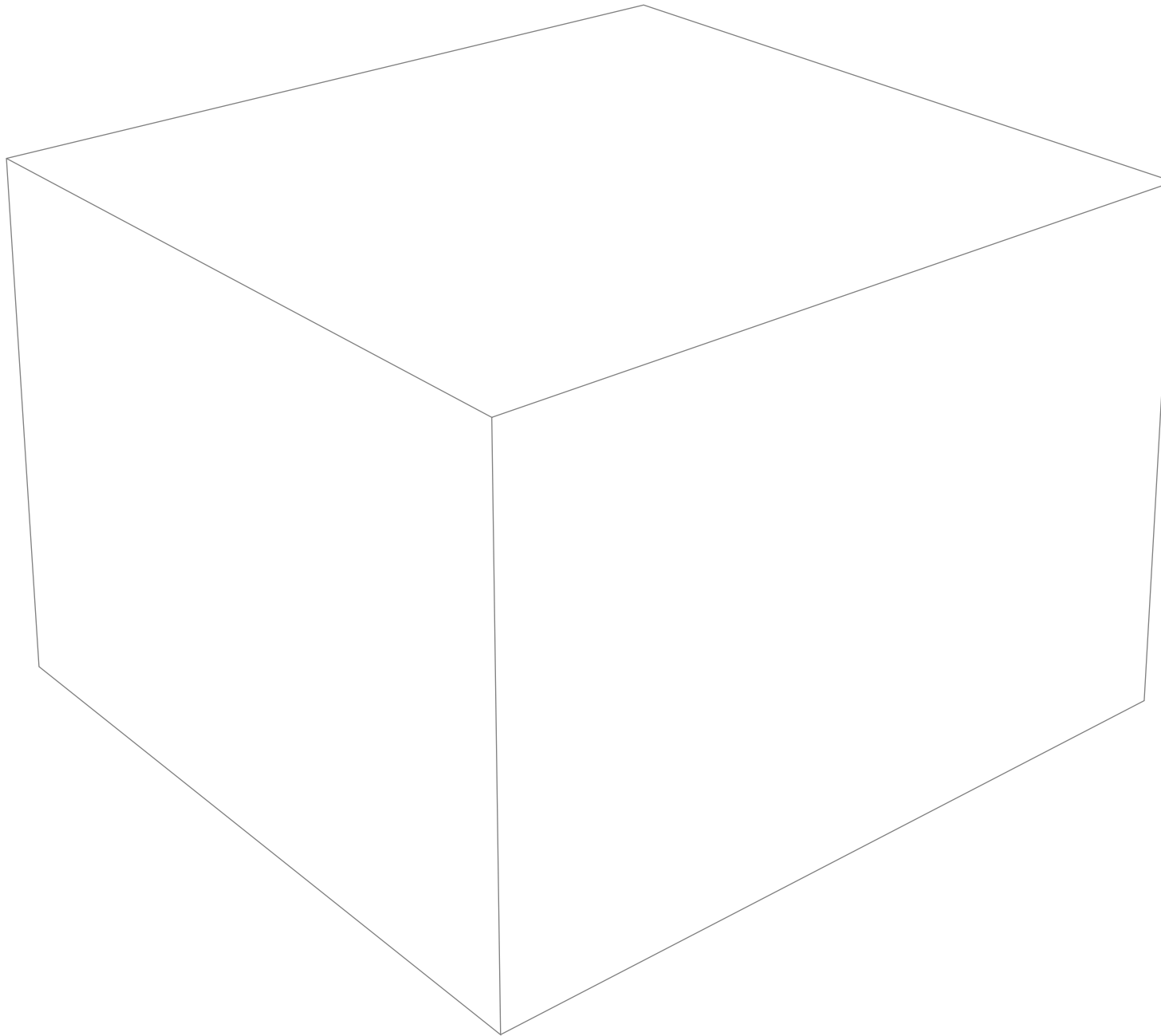
EXTEND TO CUBE

B

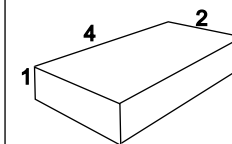
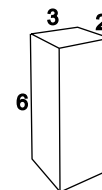
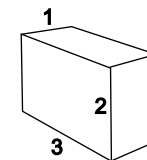
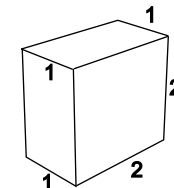
VP3

www.vp3.com.au

Once you have generated a prism you may need to modify its proportions to the overall proportions of the object you are drawing. This may mean extending or truncating.



Modify the given prism by extension and truncation until you have a prism of one of these proportions.



THEORY

If you make a mistake in pencil, don't rub it out, just continue to draw the correct line. Pencil lines are only construction lines.

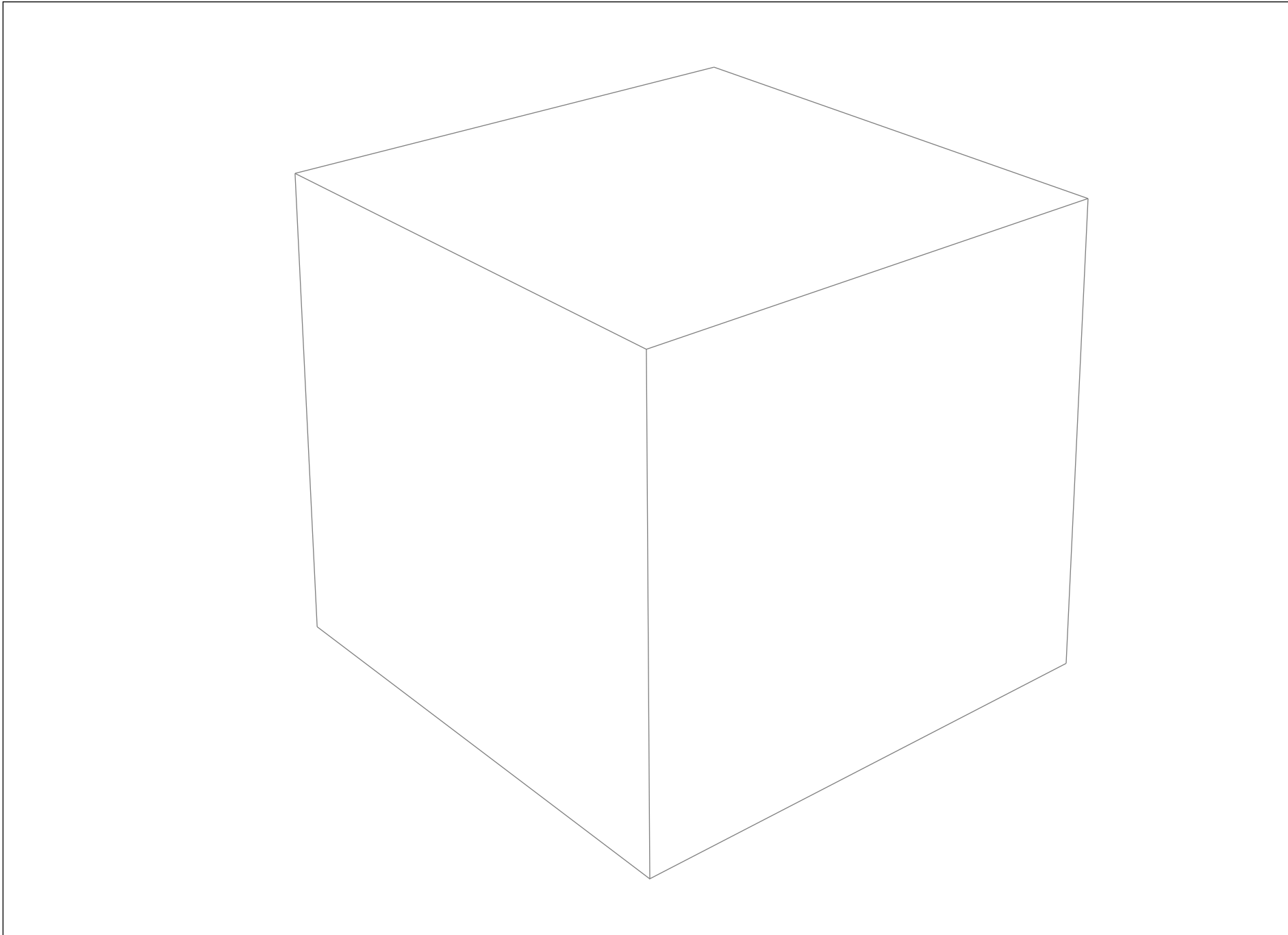
4

PROPORTION

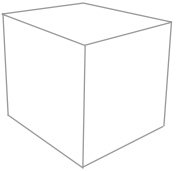
Once you have generated a prism you may need to modify its proportions to the overall proportions of the object you are drawing. This may mean extending or truncating.

B

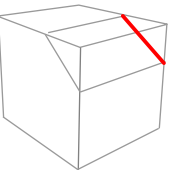
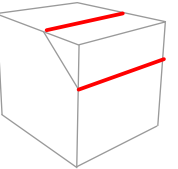
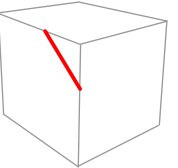
VP3



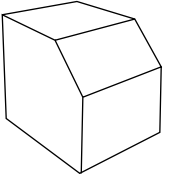
GIVEN



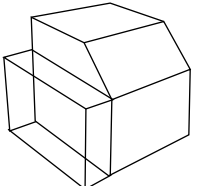
PENCIL



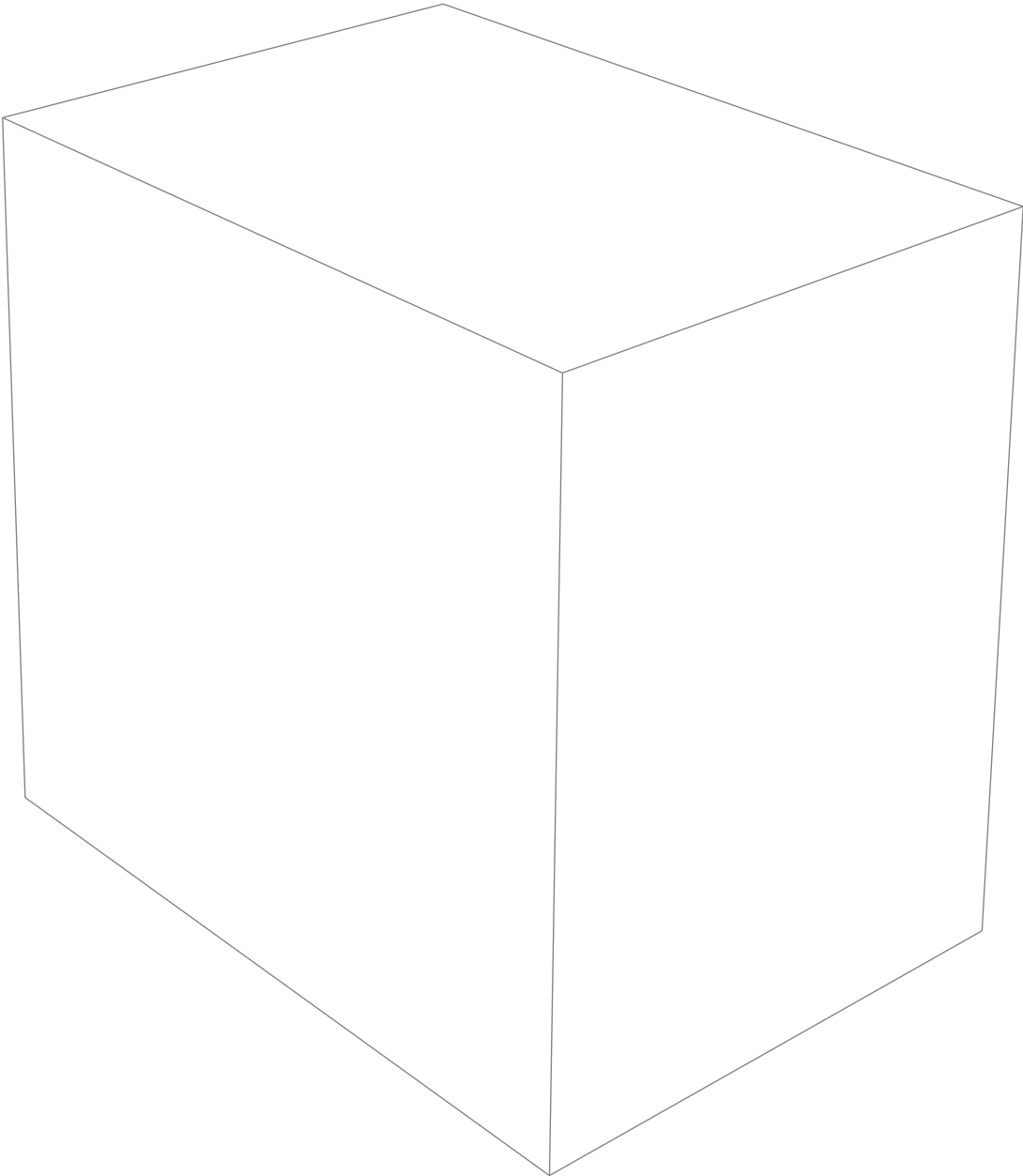
FINELINER



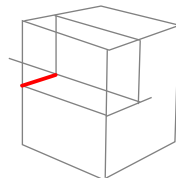
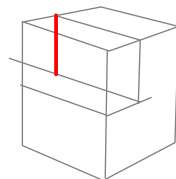
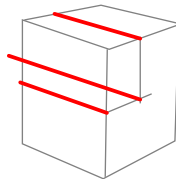
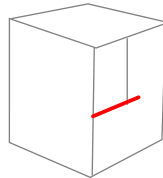
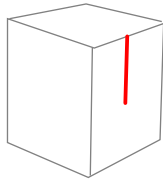
EXTENSION



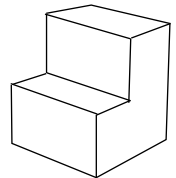
5	CHAMFER	Once your are happy with the proportions of your prism, you can add details such as a chamfer.
M	VP3	



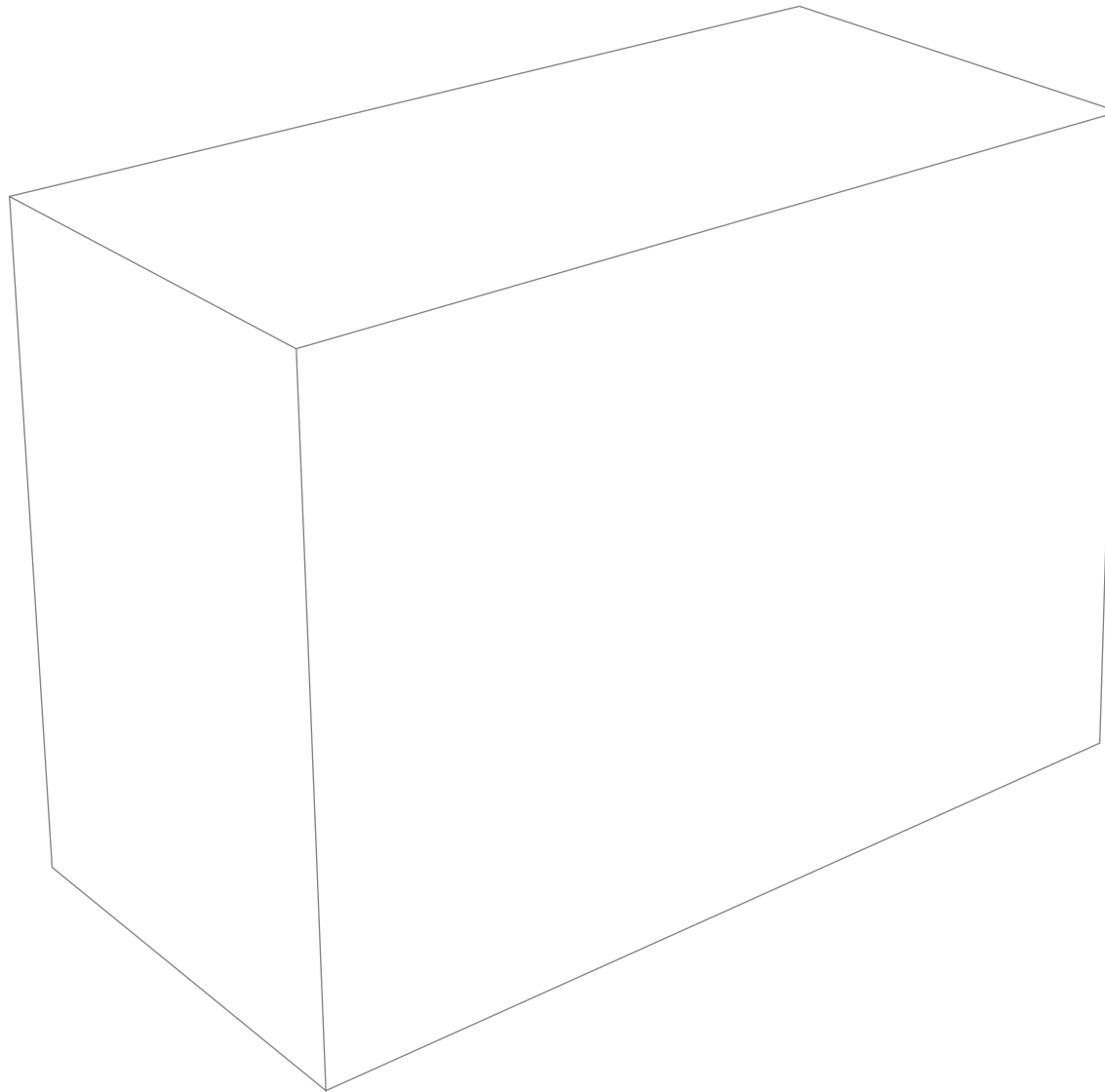
PENCIL



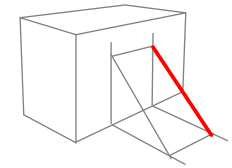
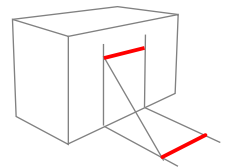
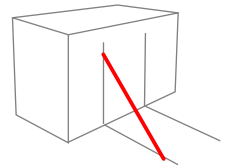
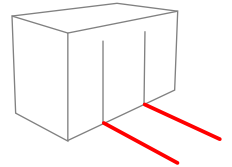
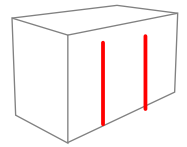
FINELINER



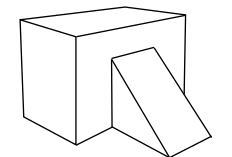
6	SIMPLE STEP		Once your are happy with the proportions of your prism, you can add details such as a step.		
M	VP3				



PENCIL



FINELINER



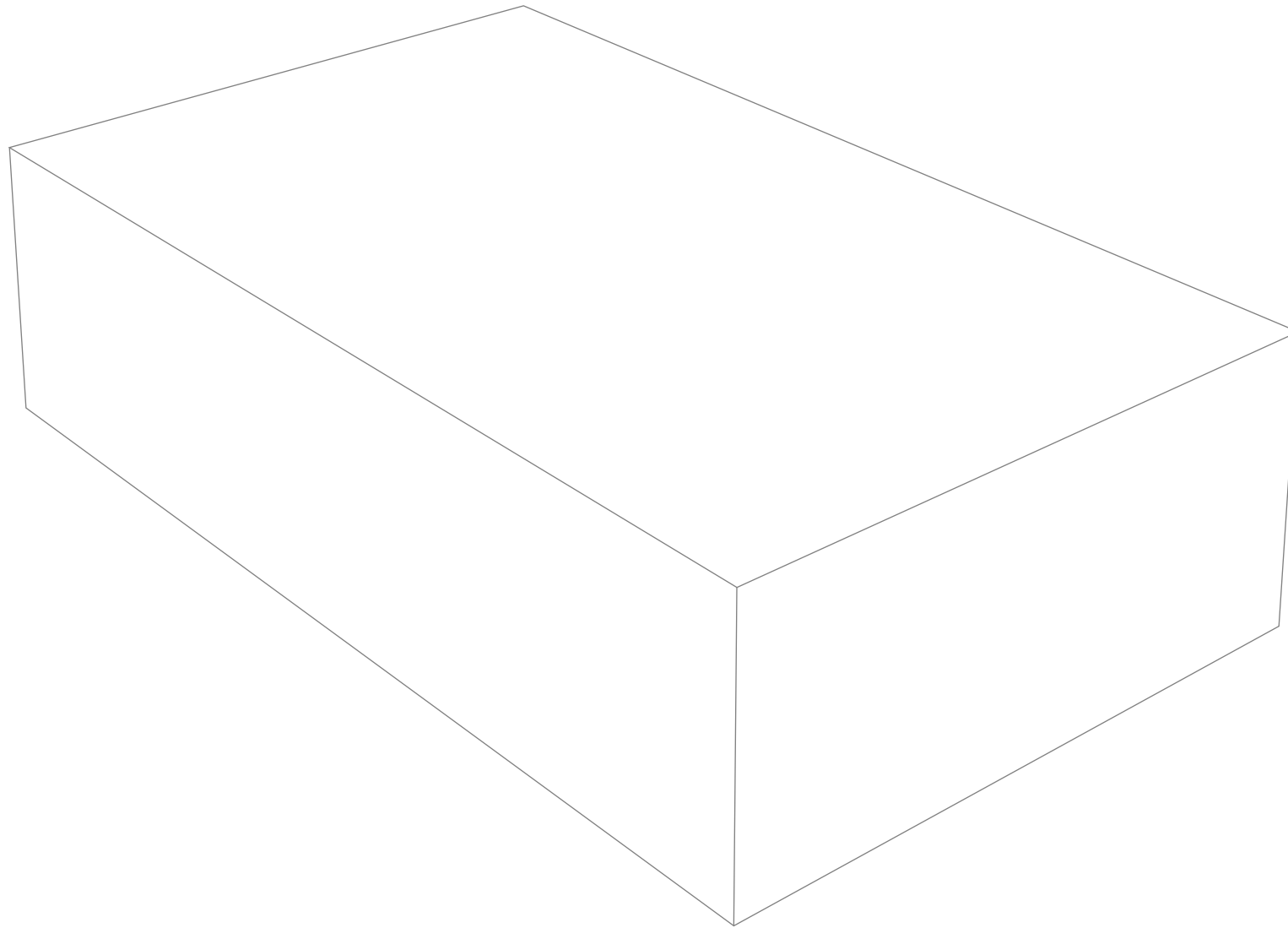
7

RAMP

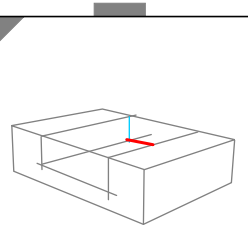
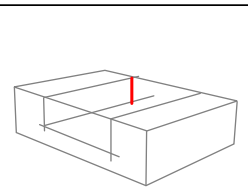
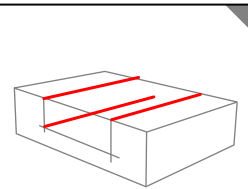
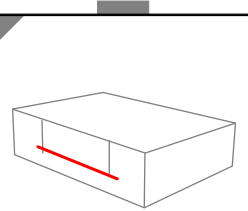
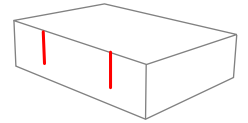
M

VP3

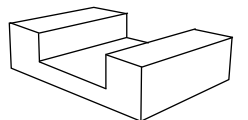
Details can also be added to the prism
such as a ramp which is really a
triangular prism.



PENCIL



FINELINER



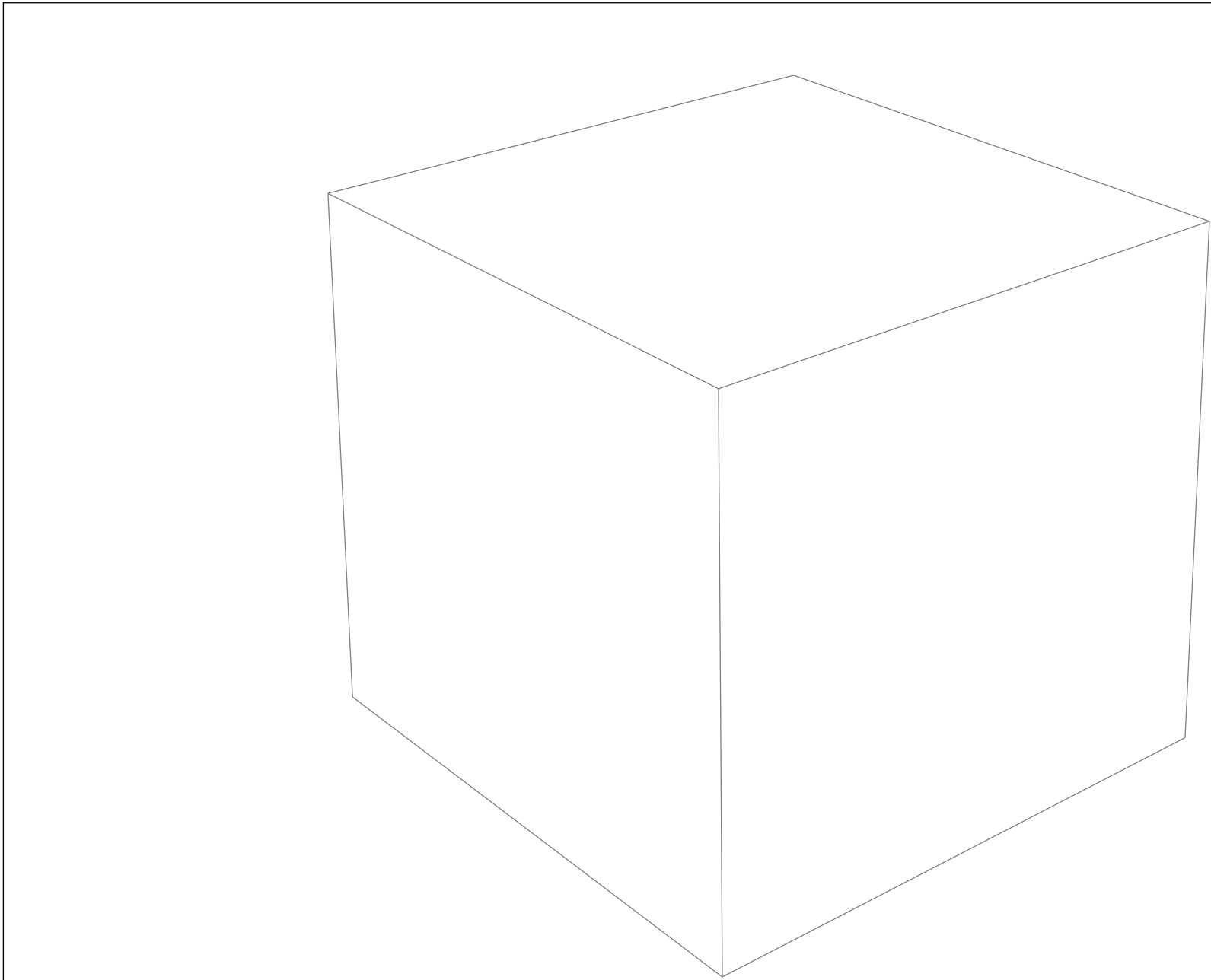
8

SLOT

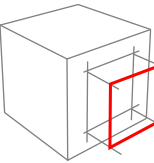
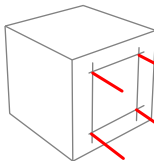
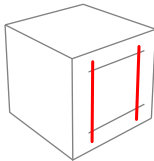
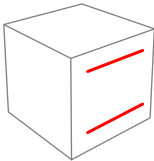
M

VP3

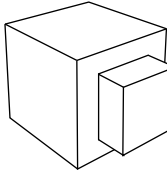
A slot can be produced by generating the shape on one surface and extending it to the other side of the prism.



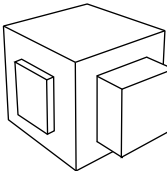
PENCIL



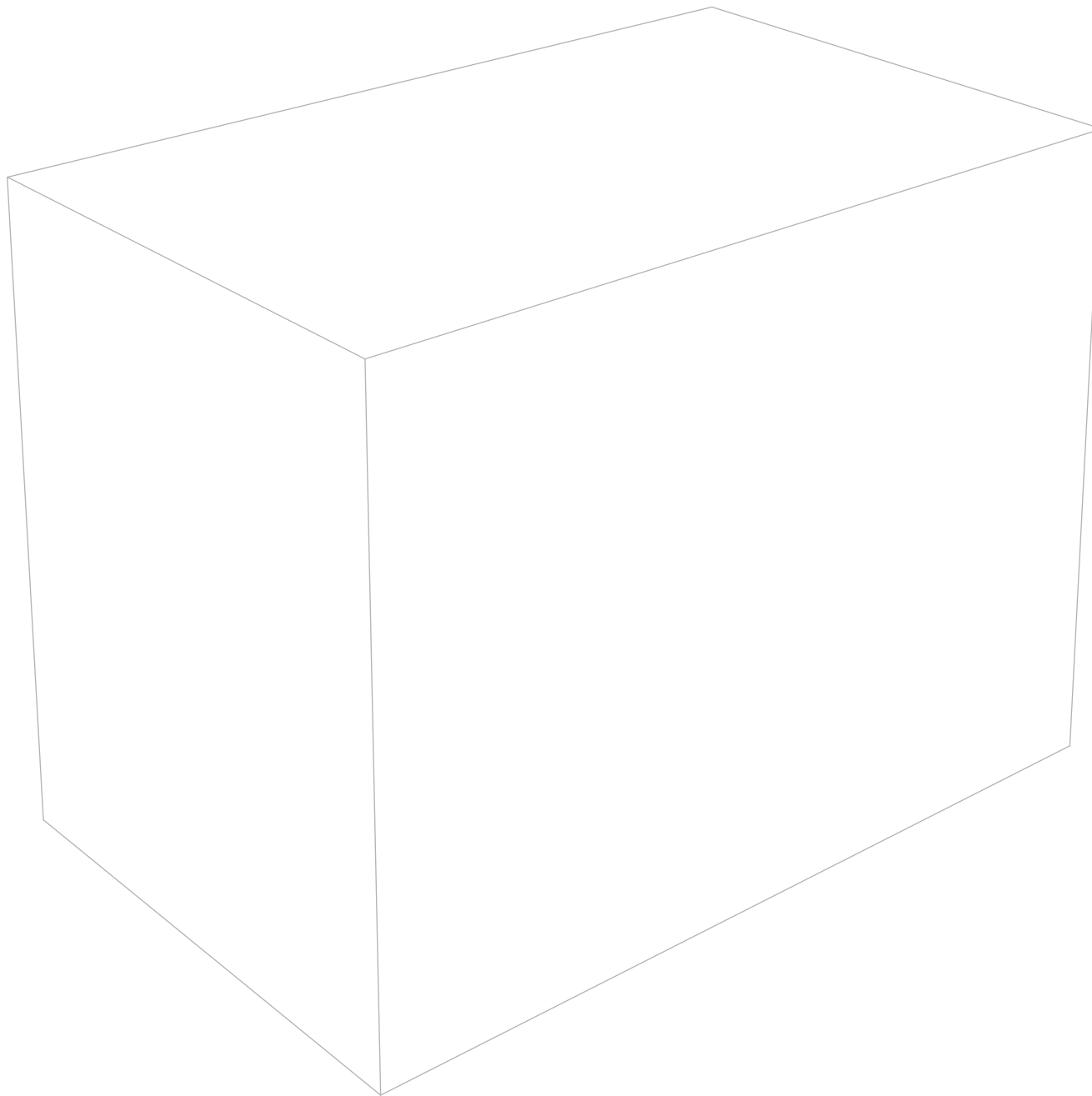
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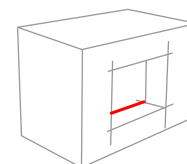
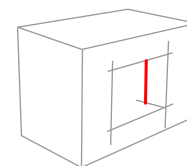
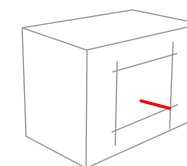
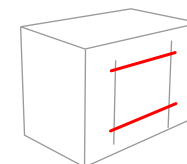
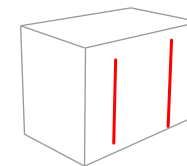
EXTENSION



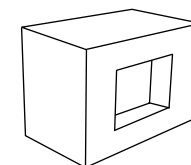
9	BOXES		Extra boxes can be added to the prism.		
M	VP3				



PENCIL



FINELINER



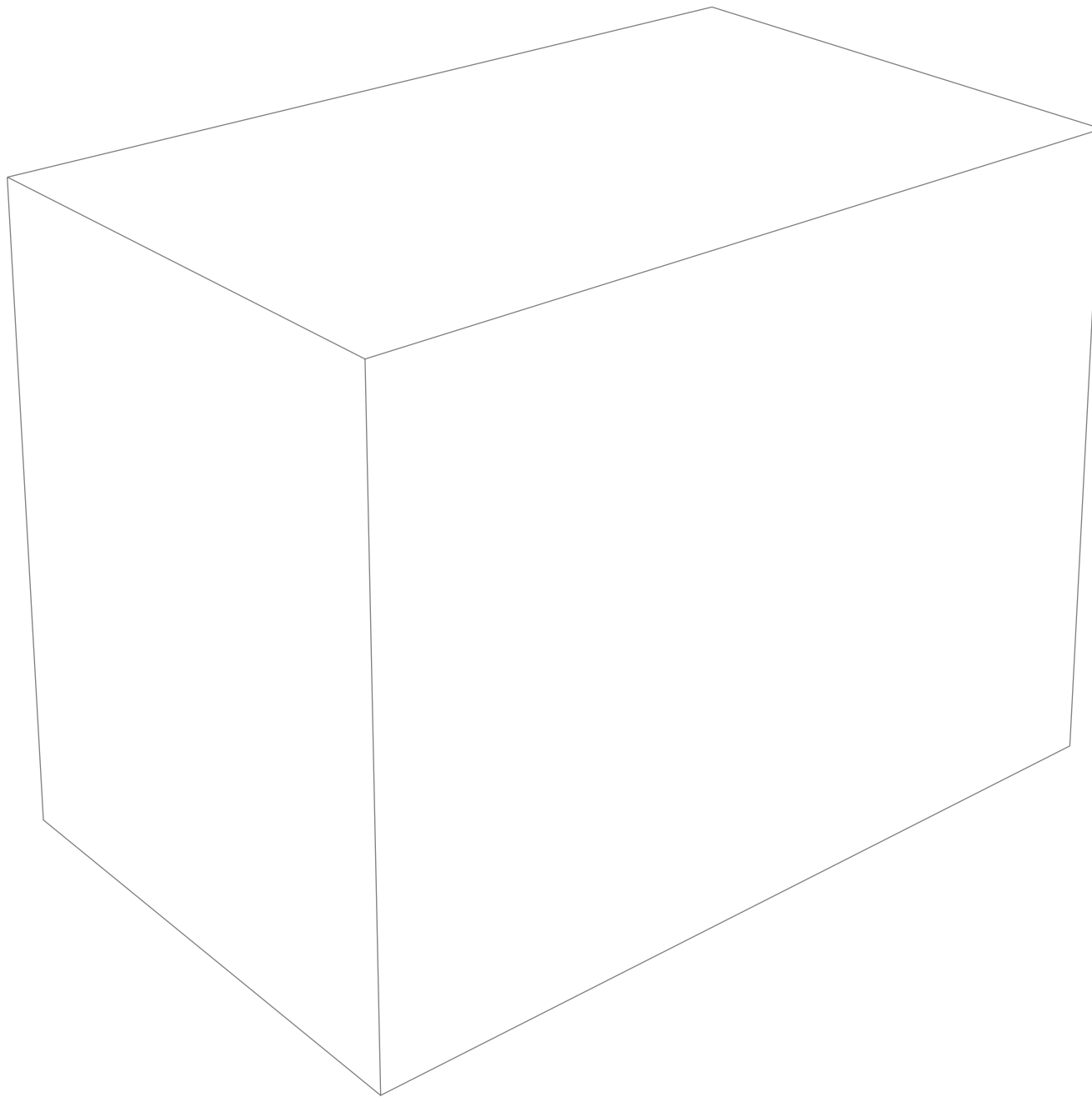
10

SQUARE INDENT

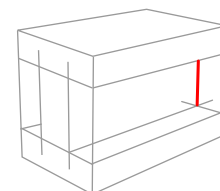
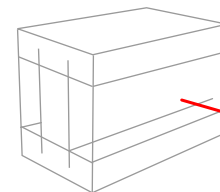
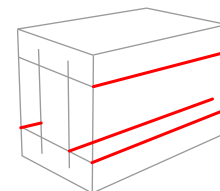
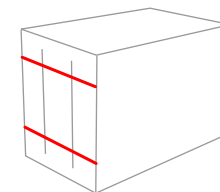
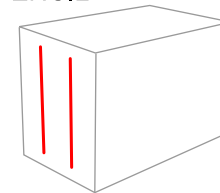
This is a helpful detail when drawing furniture.

M

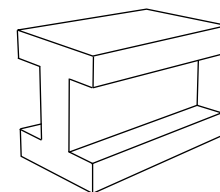
VP3



PENCIL



FINELINER



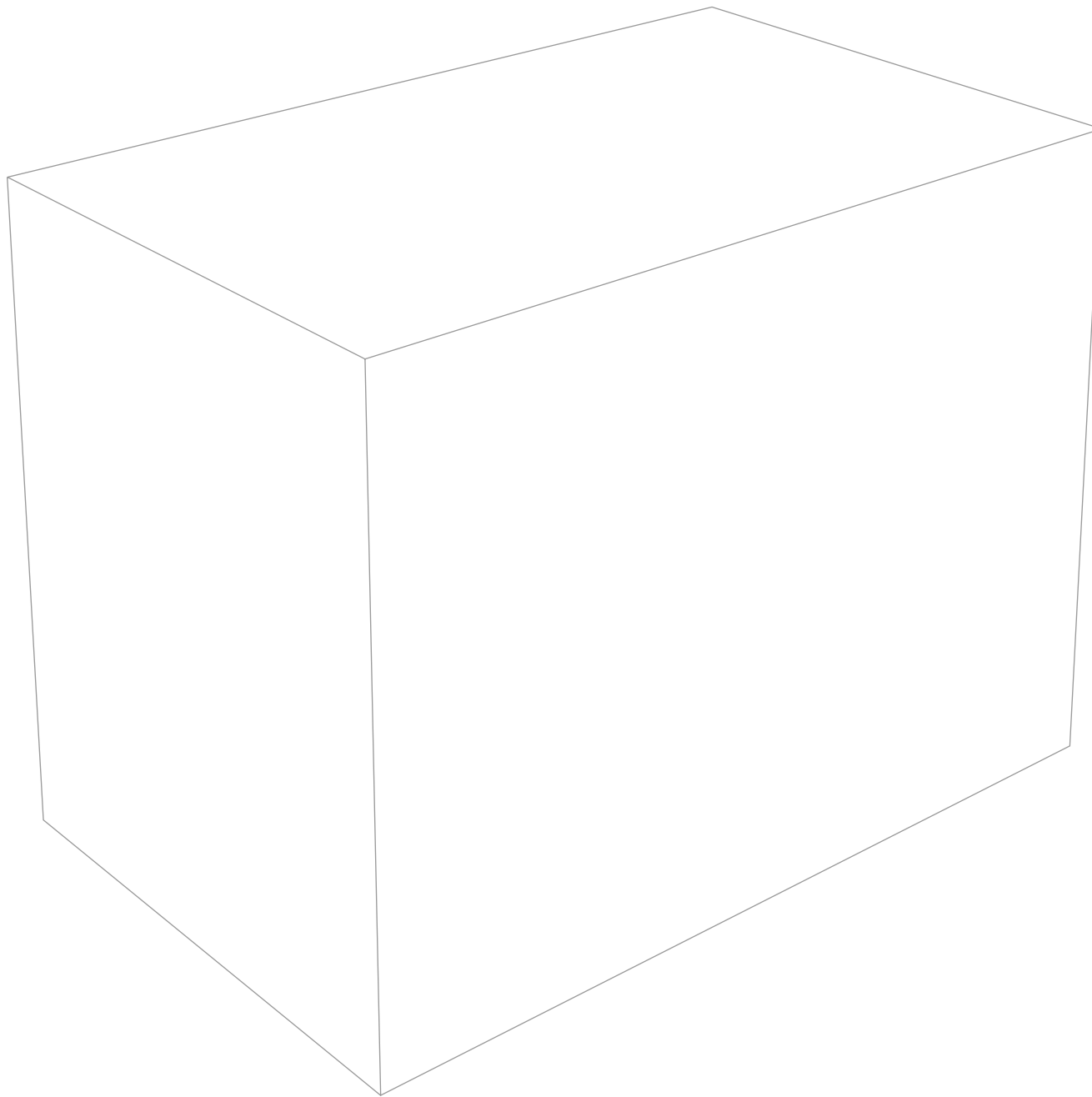
11

I BEAM

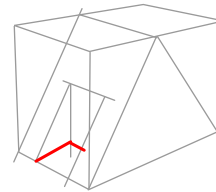
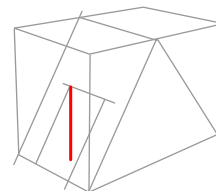
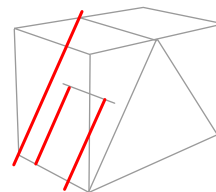
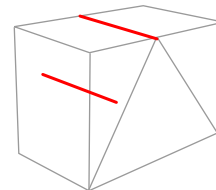
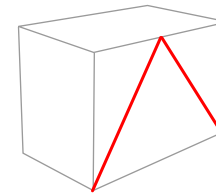
This beam is made up of a prism with two slots removed.

M

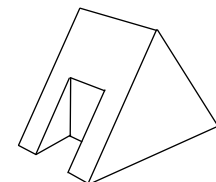
VP3



PENCIL



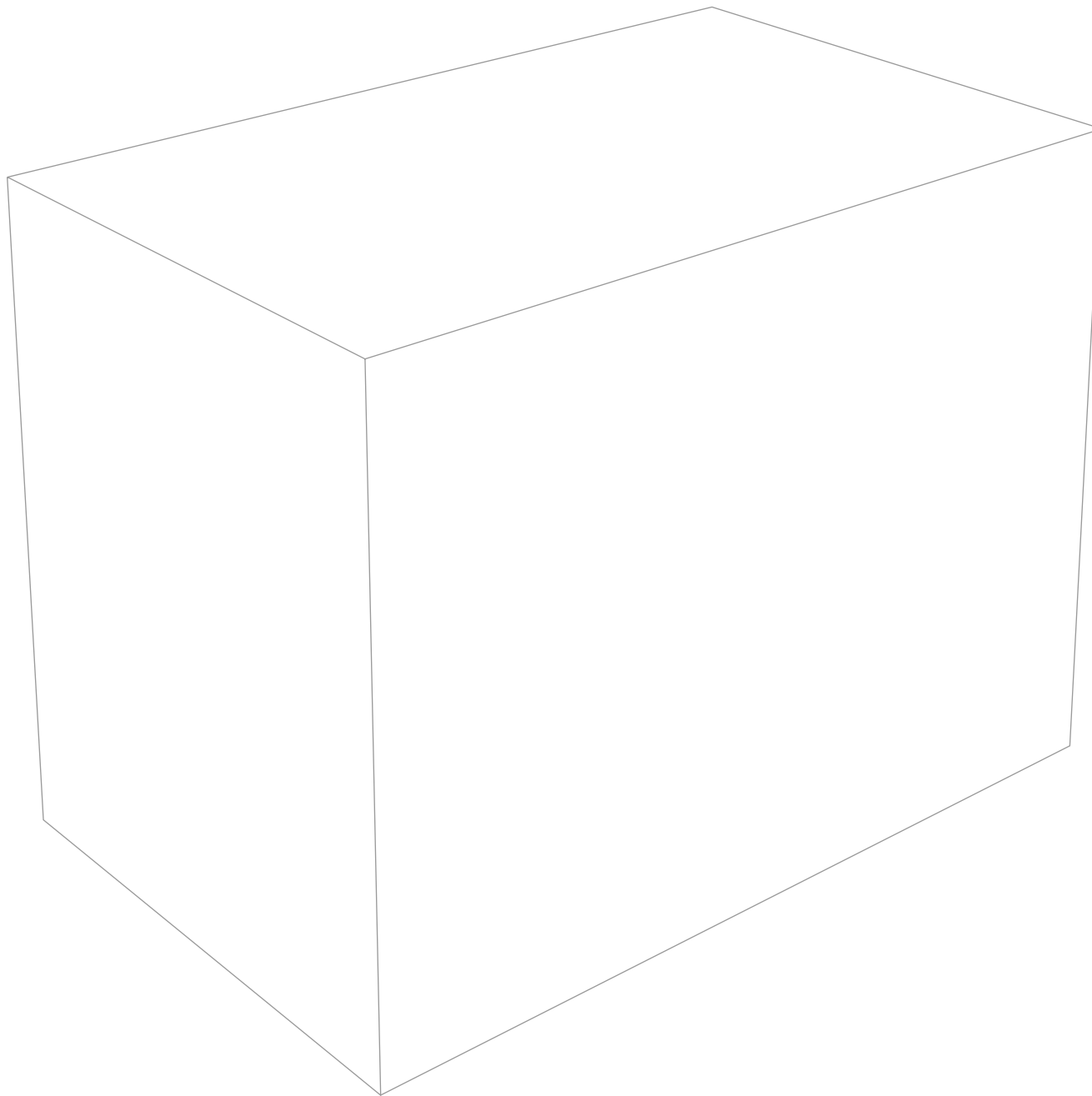
FINELINER



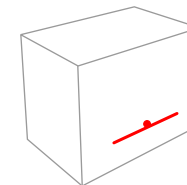
12 TRIANGULAR PRISM

M VP3

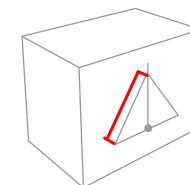
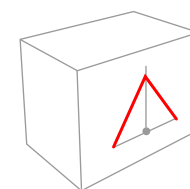
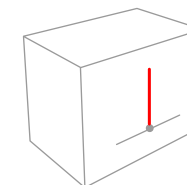
This triangular prism has a slot in it. Note that in the third step the tracking rule is not placed in a slot.



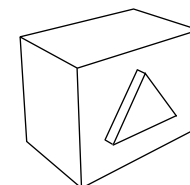
PENCIL



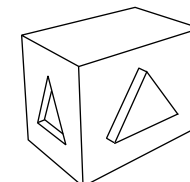
Estimate midpoint



FINELINER



EXTENSION



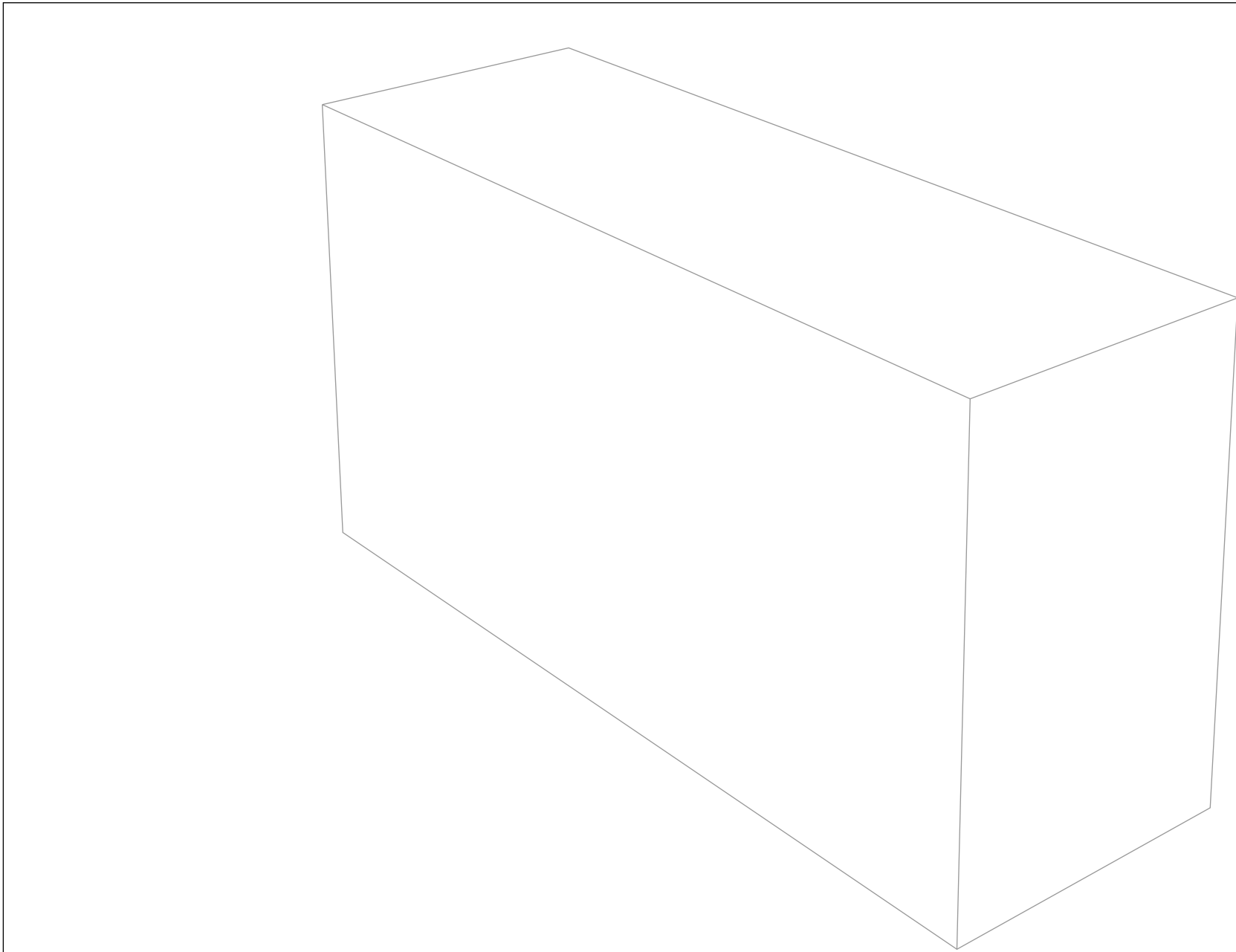
13

TRIANGLES

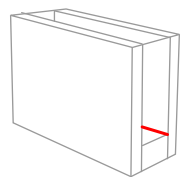
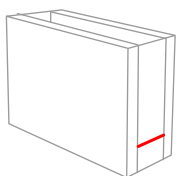
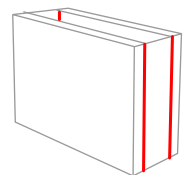
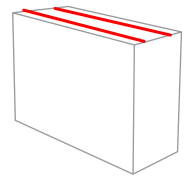
Triangles are fairly easy to generate.
Remember to start with the base line.

M

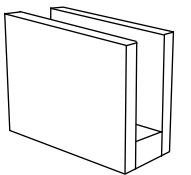
VP3



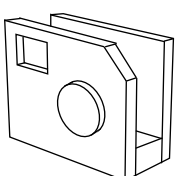
PENCIL



FINELINER

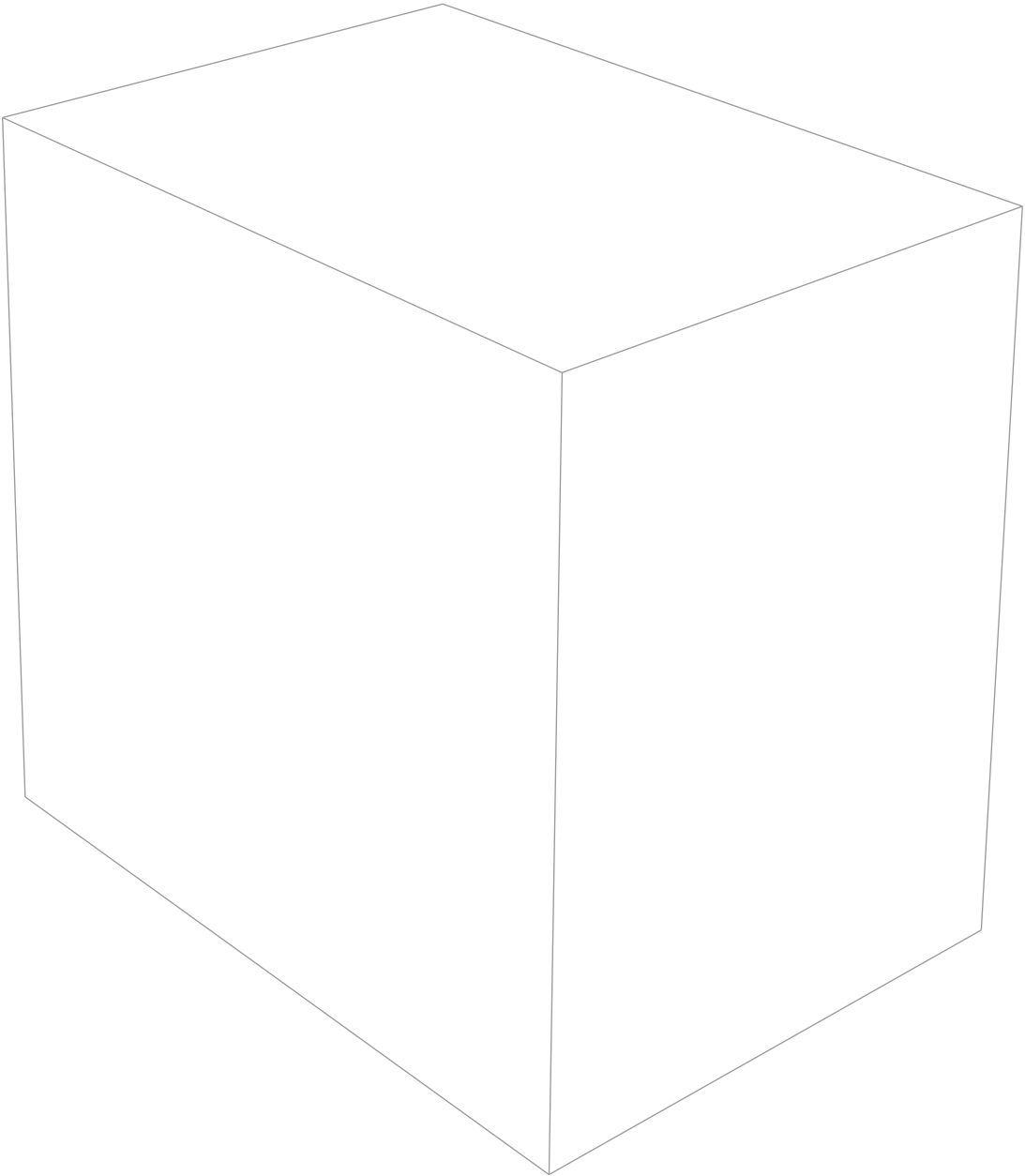


EXTENSION

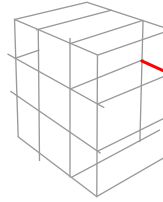
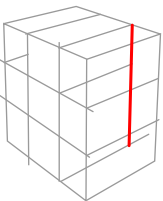
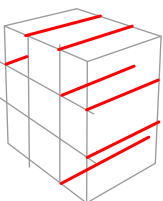
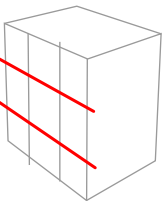
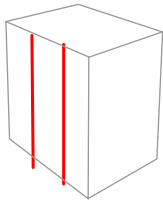


14	LETTER HOLDER	
M	VP3	

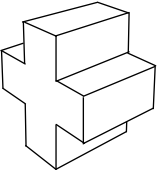
Generating a simple product should be possible with the skills learnt in previous exercises.



PENCIL



FINELINER



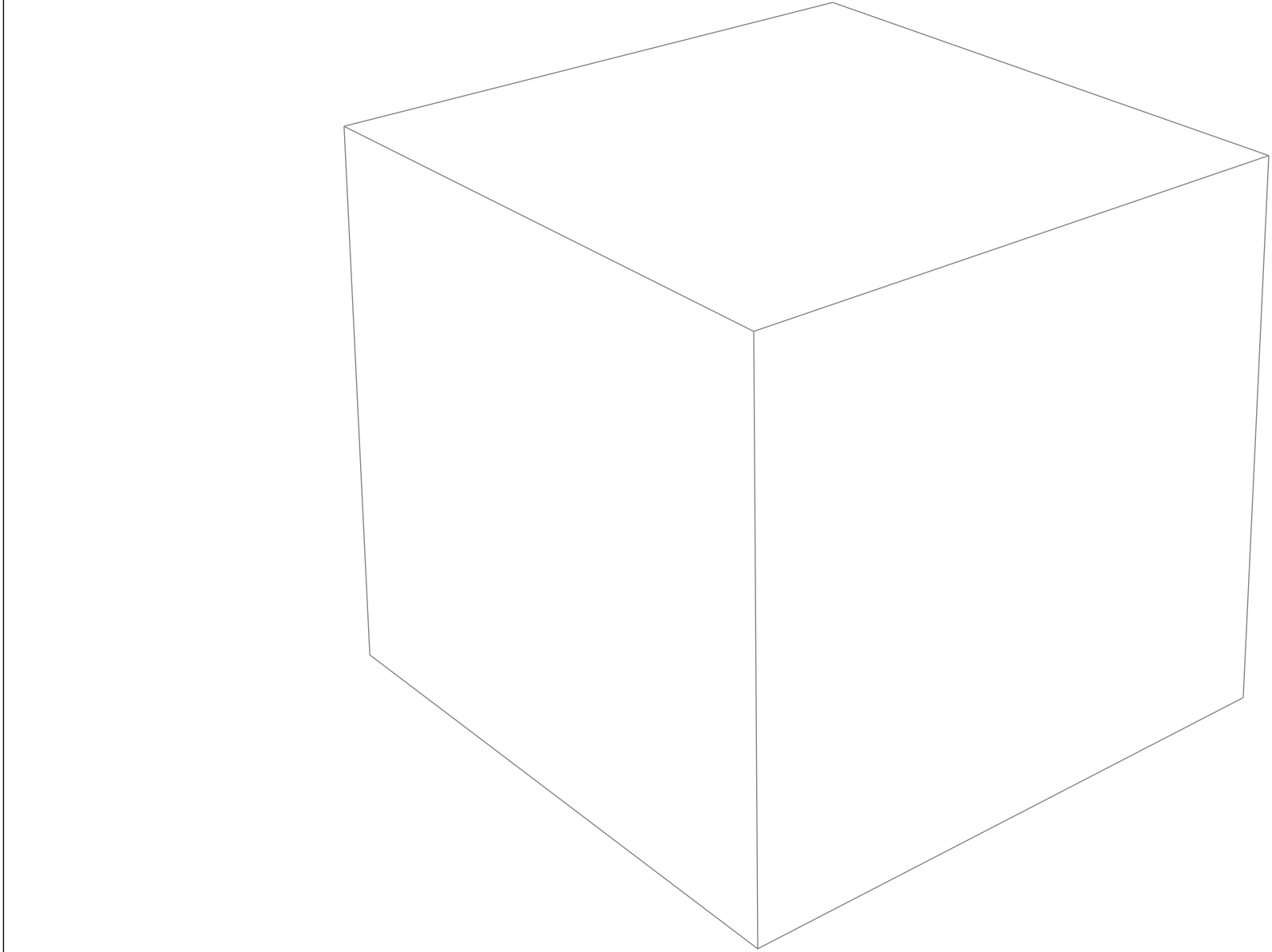
15

CROSS

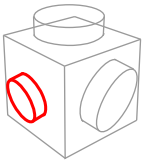
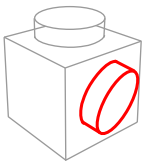
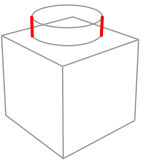
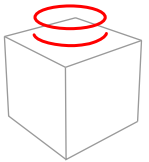
A cross is generated by the removal of the corners from a rectangular prism. Check the proportions as you go.

M

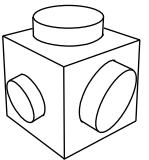
VP3



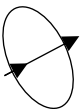
PENCIL



FINELINER



THEORY



The shortest distance across an ellipse goes to one of the three vanishing points.

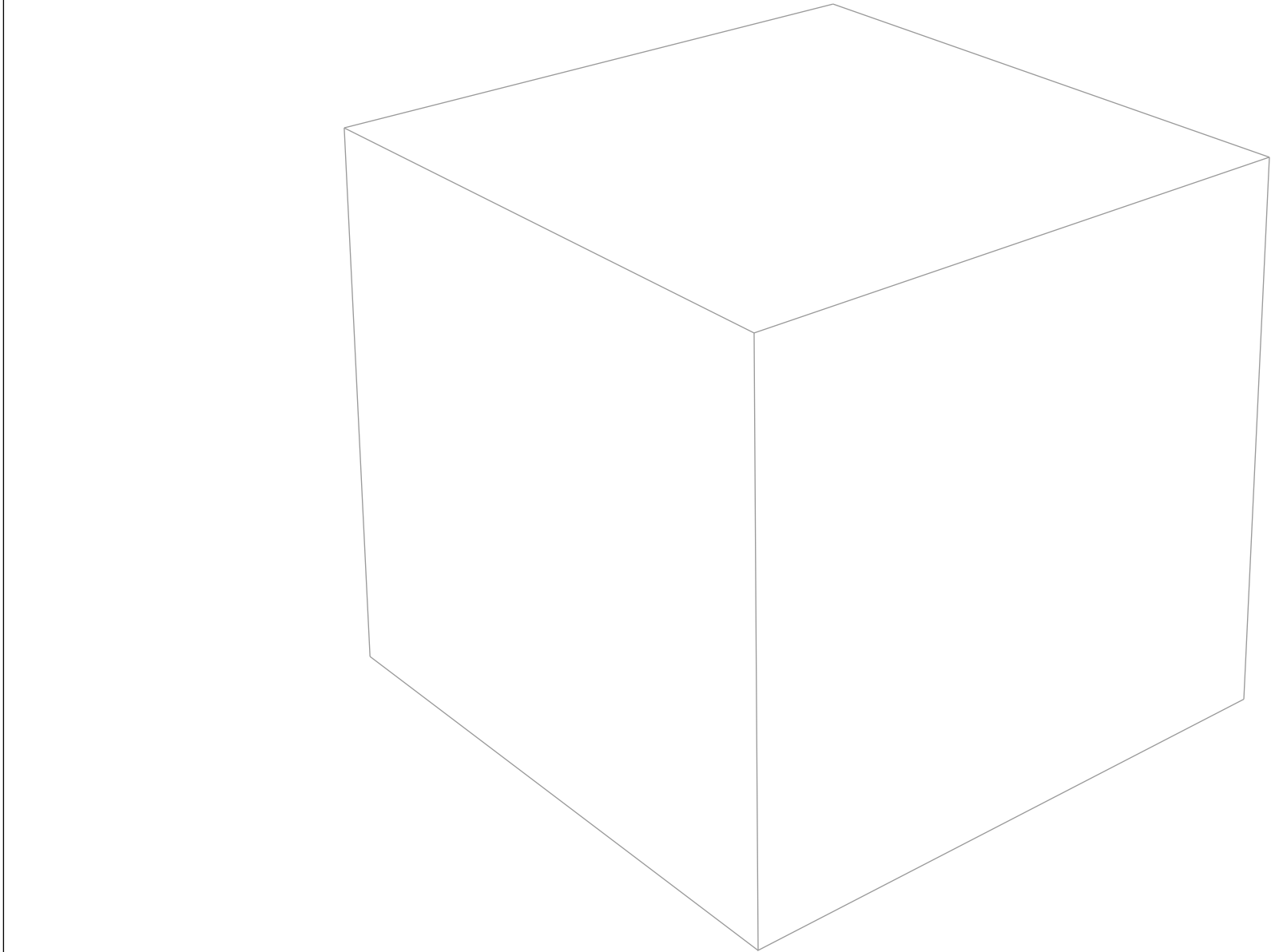
16

CYLINDERS

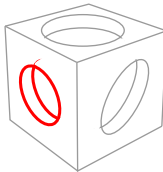
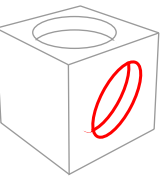
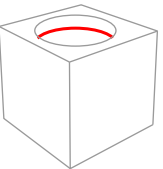
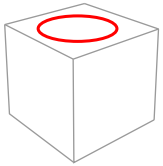
Put the tracking rule in the correct slot, rest the template on it with the smaller holes pointing towards the vanishing point. A cylinder will need two ellipses. Don't move the tracking rule to draw the second one, just slide the template to the right place.

M

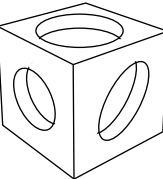
VP3



PENCIL



FINELINER



Keep the tracking rule in the same position and slide the template towards the vanishing point to draw a part ellipse inside the first ellipse.

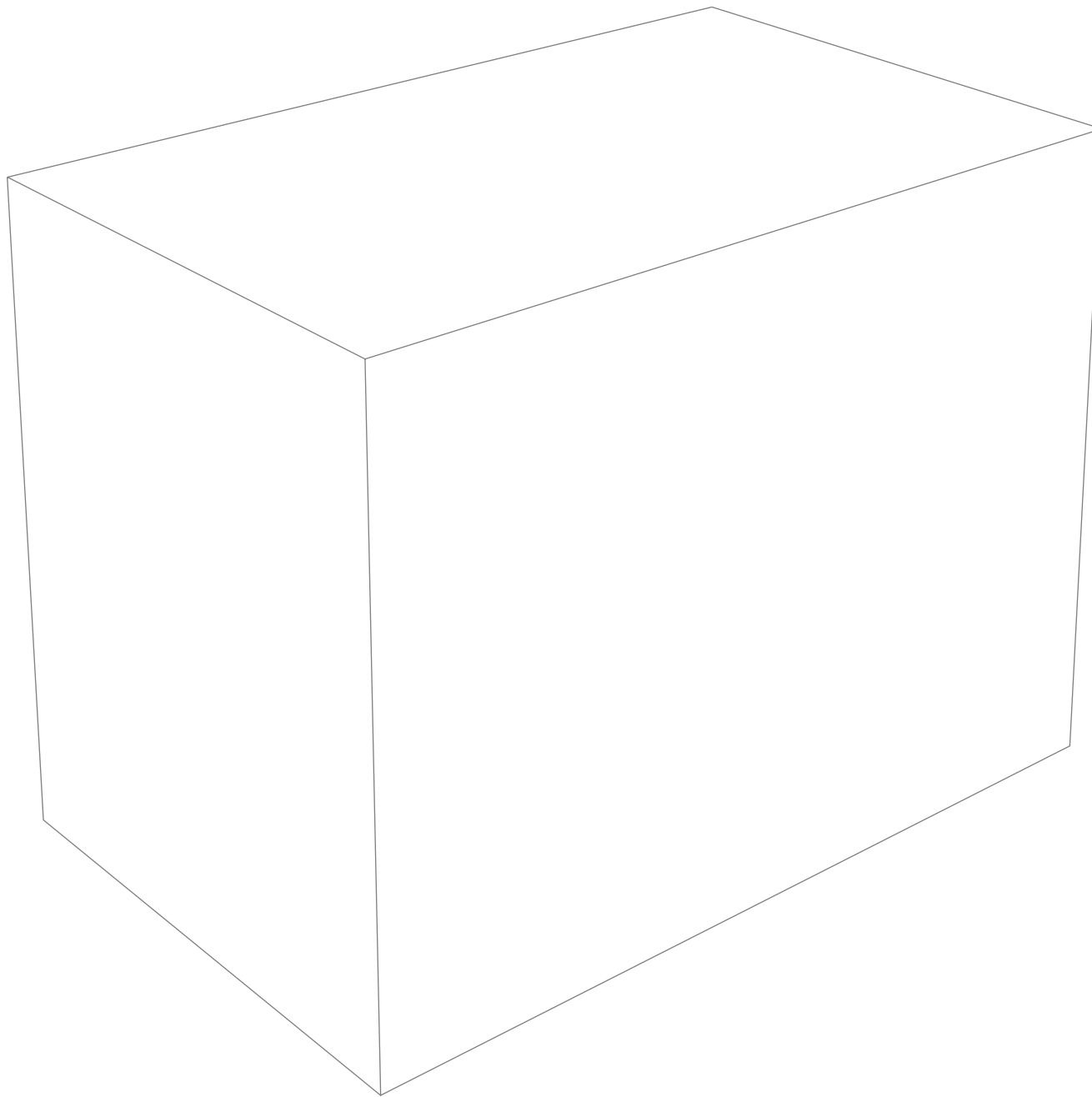
17

CIRCULAR INDENTS

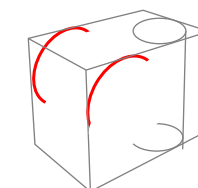
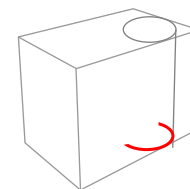
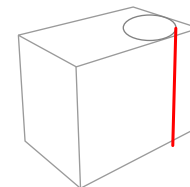
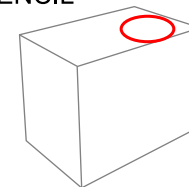
Put the tracking rule in the correct slot, rest the template on it with the smaller holes pointing towards the vanishing point. A cylinder will need two ellipses. Don't move the tracking rule to draw the second one, just slide the template to the right place.

M

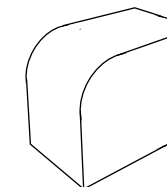
VP3



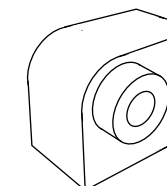
PENCIL



FINELINER



EXTENSION



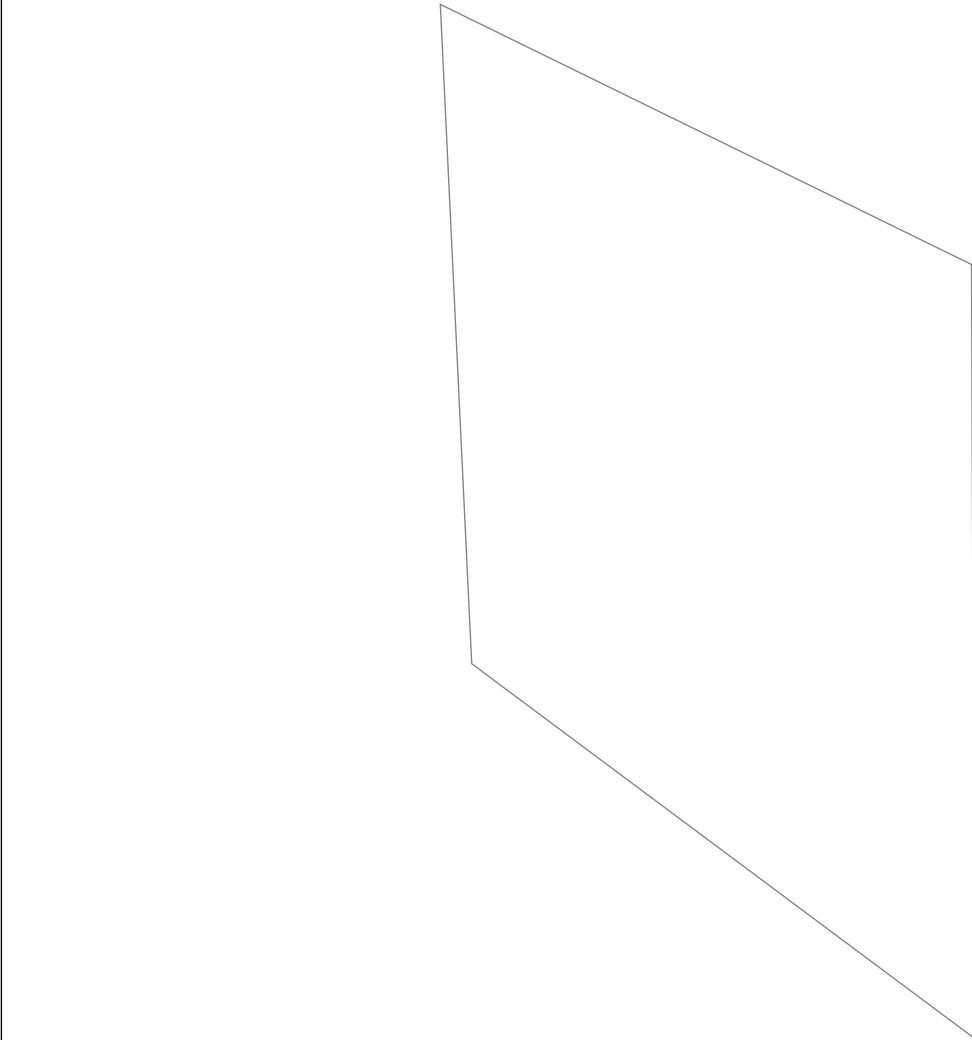
18

ROUNDED CORNERS

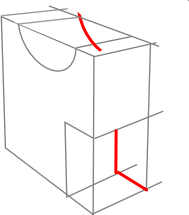
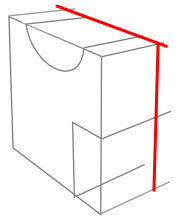
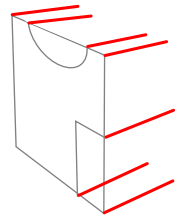
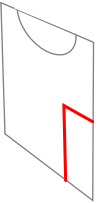
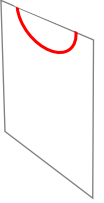
Rounded corners are just parts of cylinders.
Use the ellipse template and remember to avoid
creating corners where the curves join the lines.

M

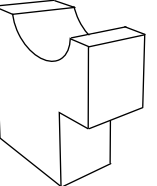
VP3



PENCIL



FINELINER



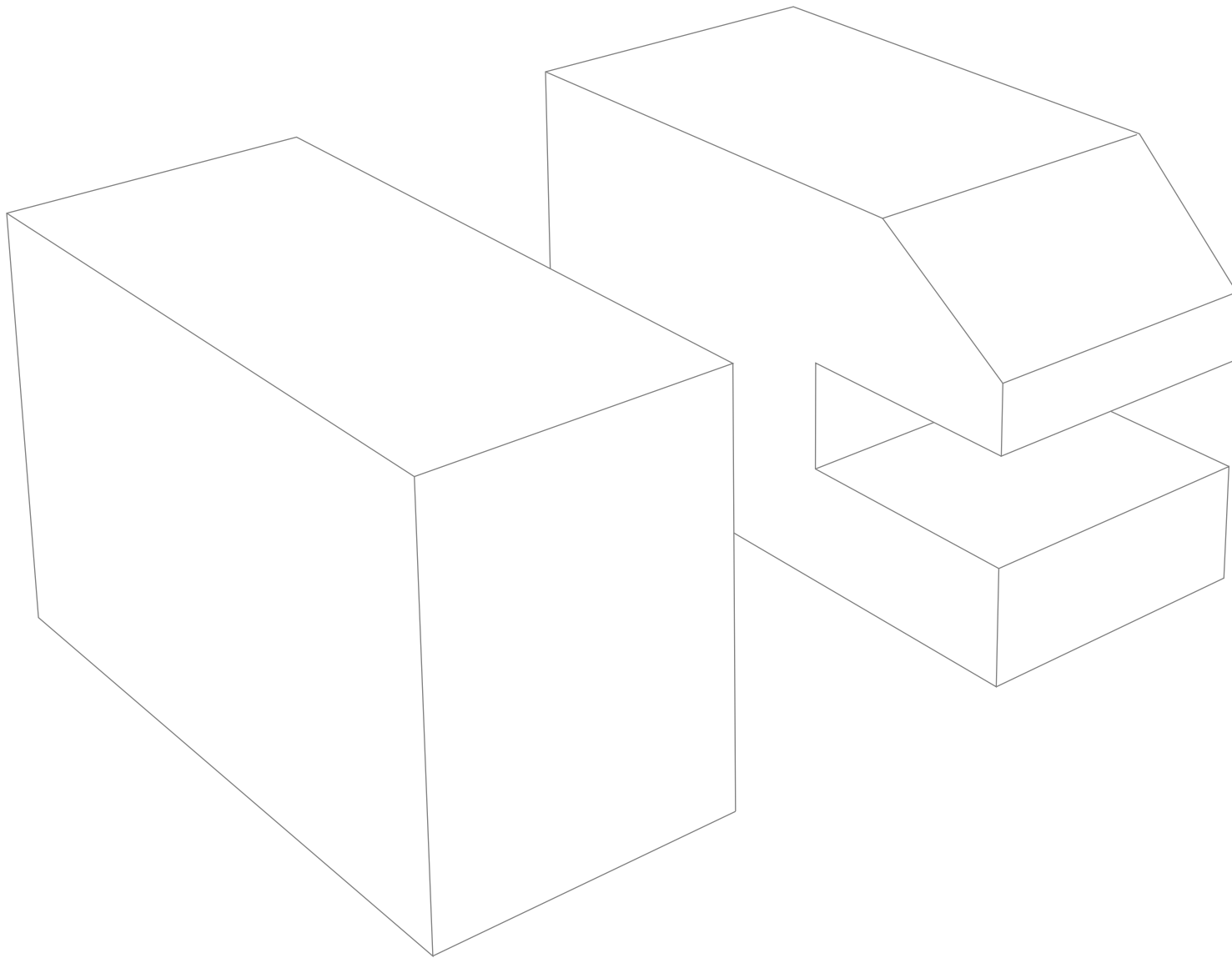
19

PROJECT SURFACE

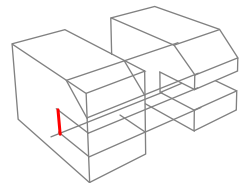
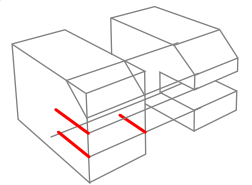
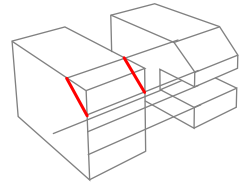
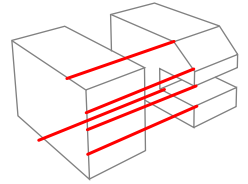
Create a new object by starting with one face of it and then projecting the corners.

T

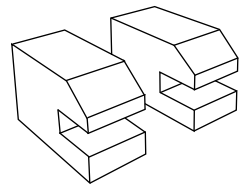
VP3



PENCIL



FINELINER



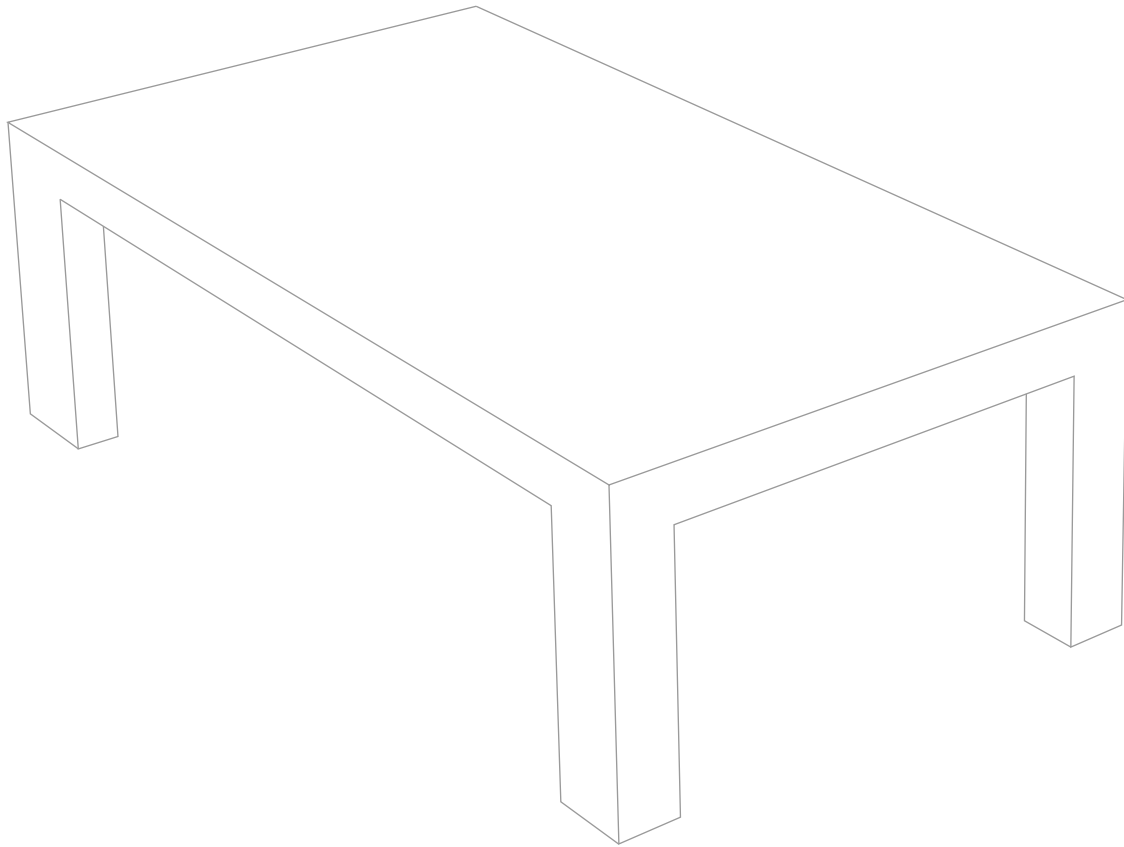
20

COPY SHAPE

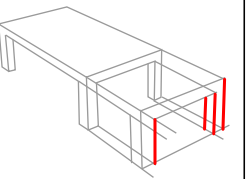
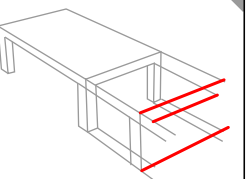
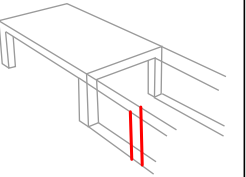
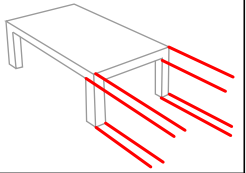
Project the corners of the first shape onto the second one to copy the object.

T

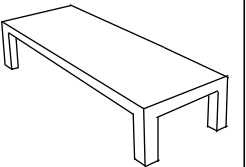
VP3



PENCIL



FINELINER



21

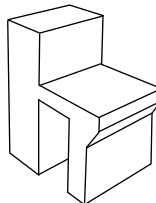
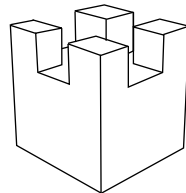
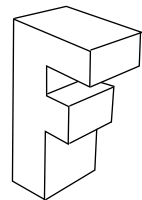
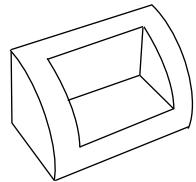
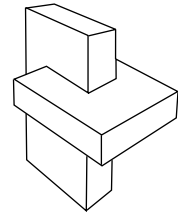
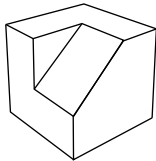
EXTENDING

Extend the object ensuring that the leg heights remain the same.

T

VP3

Try drawing some of these objects from scratch. Begin by generating a prism.
(see exercises 1,2,3)



E

VP3

24

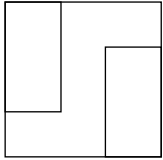
3D FROM FRONT VIEW

The top view of **three** objects are shown.
Draw what **one** of them could look like in 3D.
There are many possible solutions. Begin
by drawing a prism.

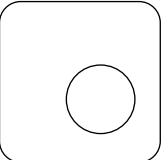
E

VP3

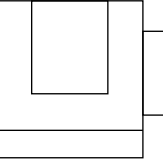
TOP VIEW 1



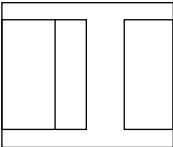
TOP VIEW 2



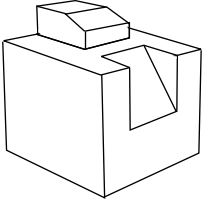
TOP VIEW 3



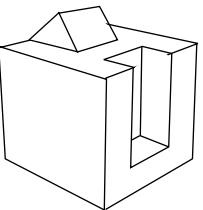
EXAMPLE

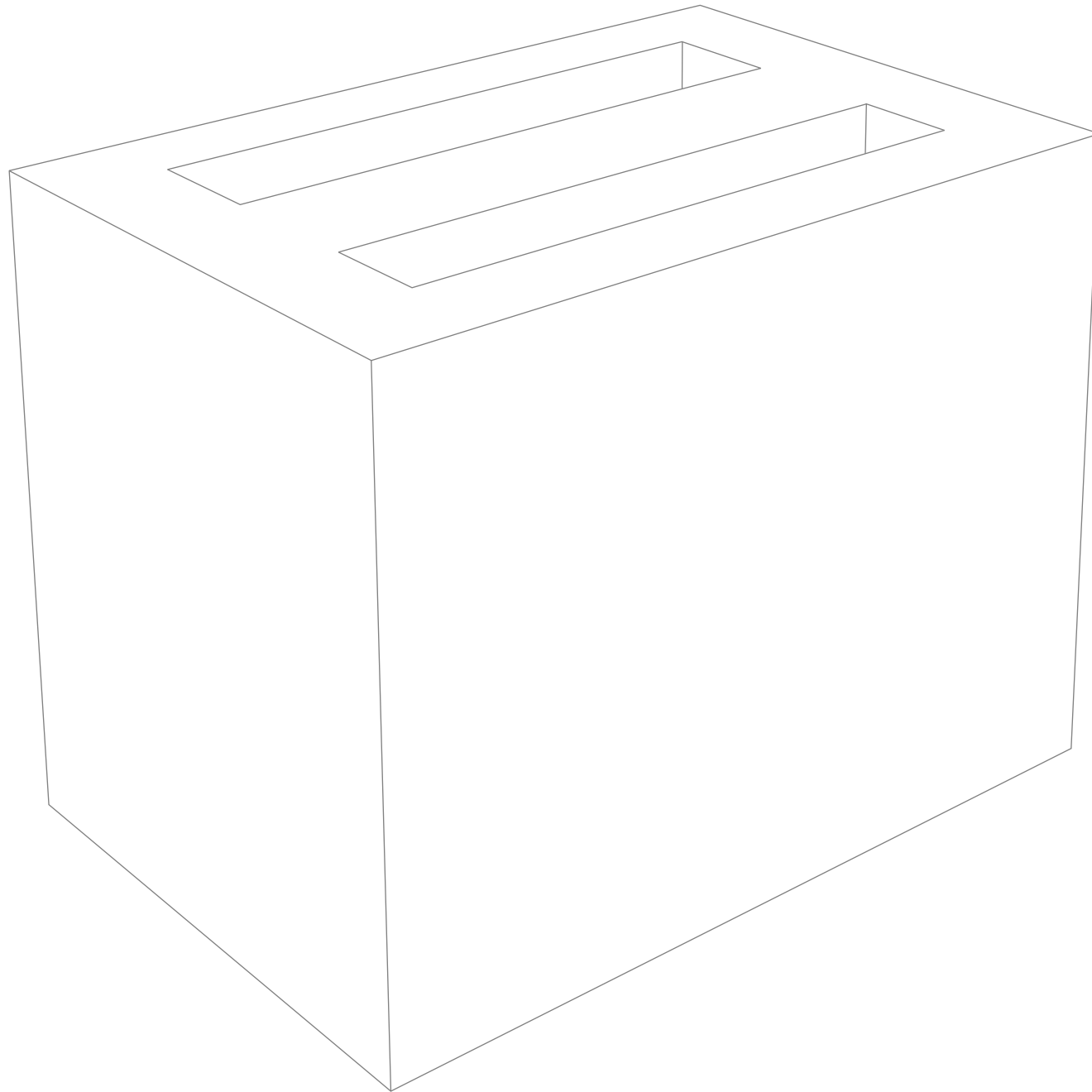


ANSWER 1

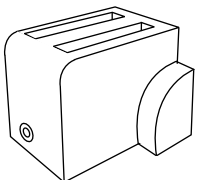


ANSWER 2





EXAMPLE



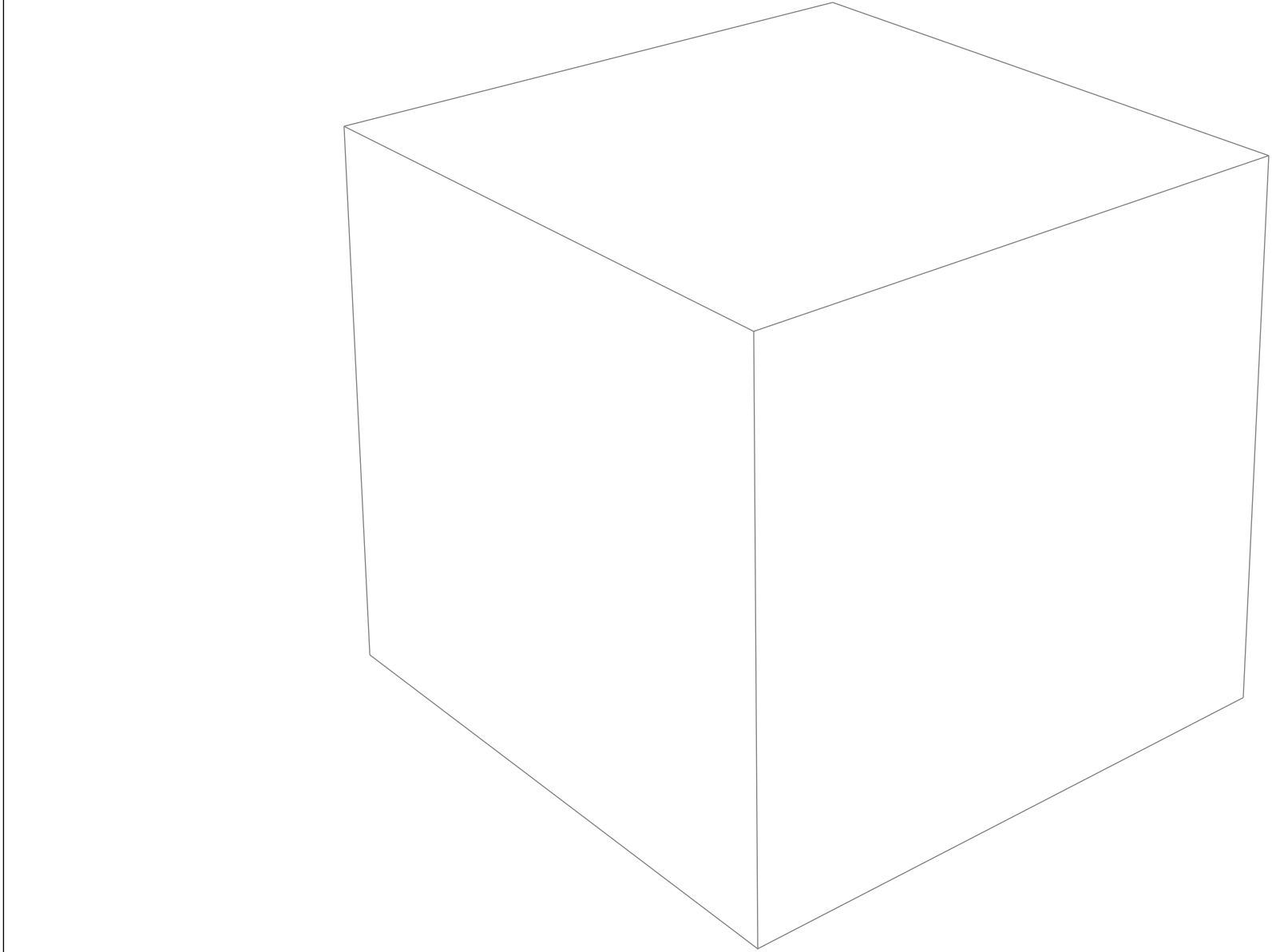
25

TOASTER DESIGN

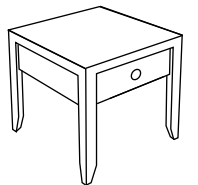
Design your own toaster using the details covered in the previous exercises.

D

VP3



EXAMPLE



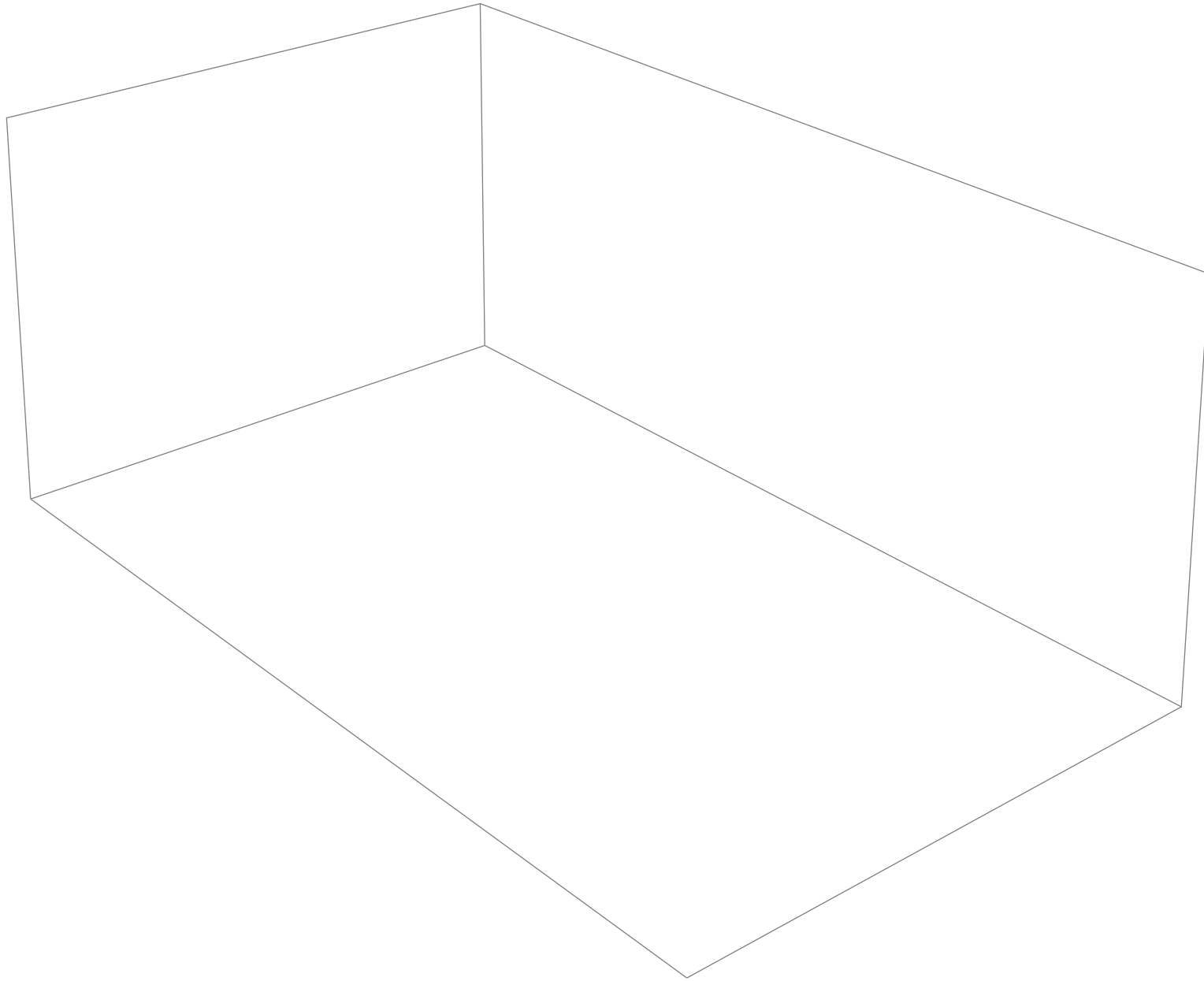
26

SIDE TABLE DESIGN

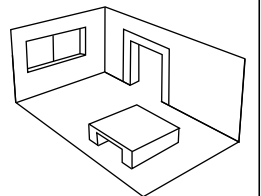
Design your own side table using the details covered in the previous exercises.

D

VP3



EXAMPLE



27

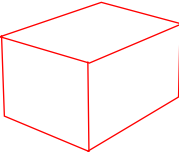
INTERIOR

Design an interior including a window,
doorway and a feature such as a table.

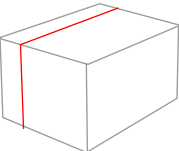
D

VP3

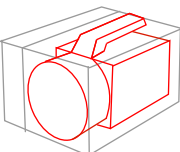
PENCIL



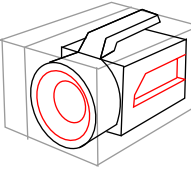
Draw a prism



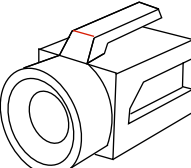
Modify it to the correct proportions



Modify it to the correct overall shape.

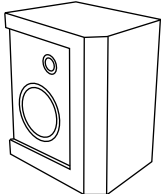


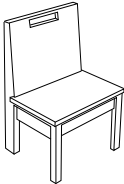
Add details



Fineliner the correct lines.

28	TORCH DESIGN		Design your own torch using the details covered in the previous exercises.		
D	VP3				

				DRAW A PRISM IN PENCIL			
				MODIFY IT TO THE CORRECT PROPORTIONS			
				MODIFY IT TO THE CORRECT OVERALL SHAPE			
				ADD DETAILS			
				FINELINER THE CORRECT LINES			
				EXAMPLE			
29	SPEAKER DESIGN		Design your own speaker box using the details covered in the previous exercises.				
D	VP3						
							

				DRAW A PRISM IN PENCIL	
				MODIFY IT TO THE CORRECT PROPORTIONS	
				MODIFY IT TO THE CORRECT OVERALL SHAPE	
				ADD DETAILS	
				FINELINER THE CORRECT LINES	
				EXAMPLE	
30	CHAIR DESIGN		Design your own chair using the details covered in the previous exercises.		
D	VP3				