19.2

Will an oblique rectangular prism tessellate space? Explain why or why not.

Will a non-oblique prism with bases that are obtuse triangles tessellate space? Explain why or why not.

20.1

What is the scale factor indicated by these two similar quadrilaterals? Figure A is the original and figure B is the image.

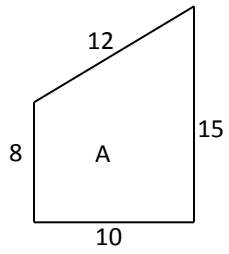
A. $\frac{5}{3}$

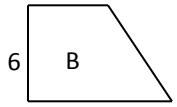
B. $\frac{1}{2}$

C. $\frac{4}{3}$

D. $\frac{3}{4}$

E. None of the above





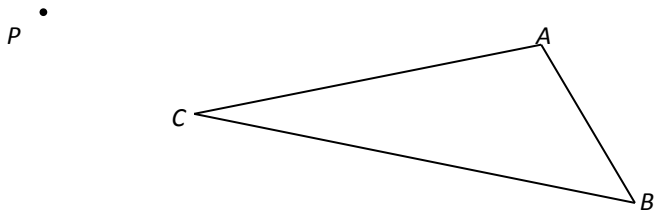
The following is an incorrect statement: *50 is 125% more than 40*
Form a correct statement in each case by filling in the blank with either words or numbers:

50 is 125% _____ 40

_____ is 125% more than 40

50 is _____ percent more than 40

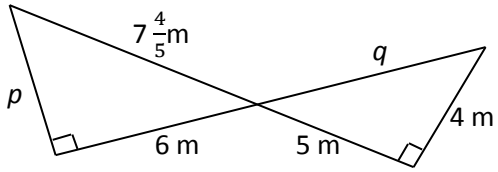
Draw an image of triangle *ABC* using *P* as your center and a scale factor of 1.5.
Label your new vertices *A´B´C´*.



Briefly describe your steps in locating point *A´*.

20.2

Two similar triangles are shown in this figure. Redraw each triangle so that the right angle is in the lower left corner and corresponding parts are in corresponding positions. Include all measurements and labels. Show all steps of your work to determine the values of *p* and *q*. Do not use decimals in your work or your answers.

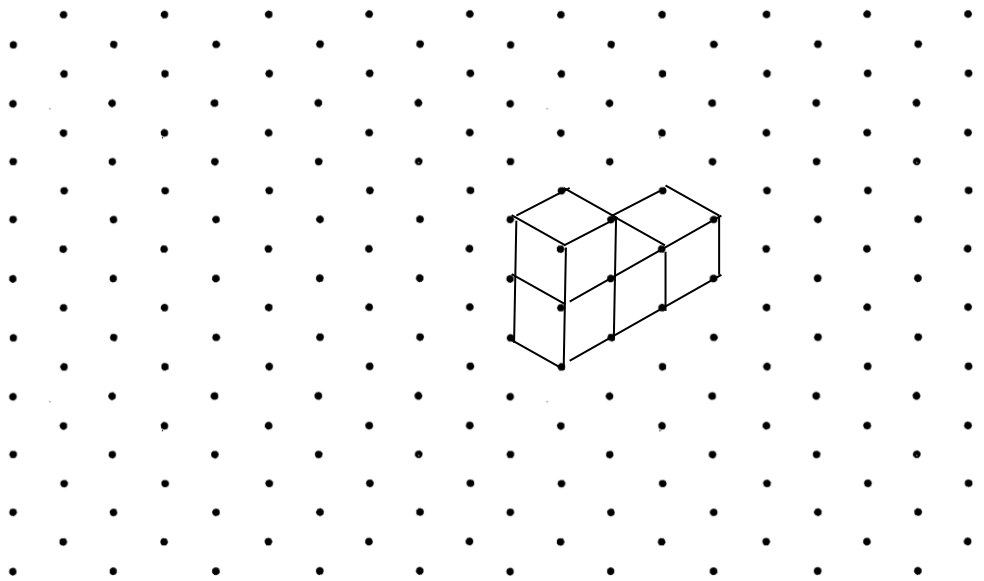


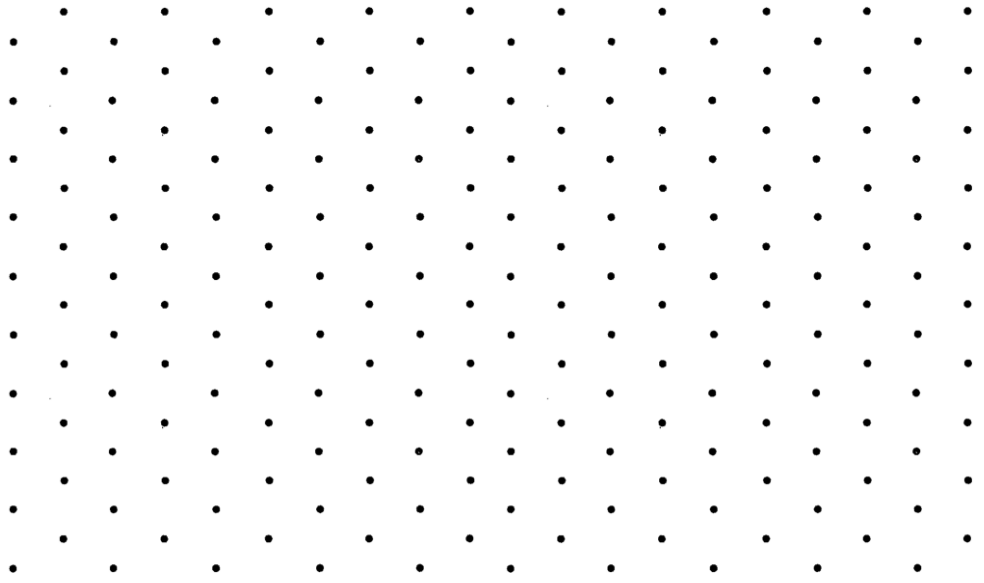
New drawings:

p = _____ *q* = _____

20.3

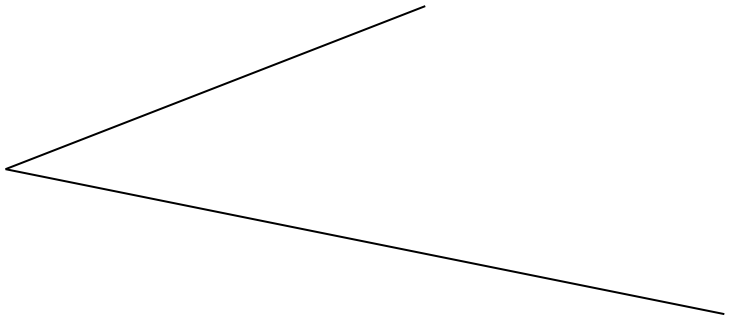
For the given shape, draw a similar, but larger shape on the second dot grid using a scale factor of 2.





21.1

Bisect the angle shown using a compass and a straightedge, but not a protractor.
Do not erase any key construction marks.



Briefly describe your steps:

Give the sizes of the lettered angles in the following figure.

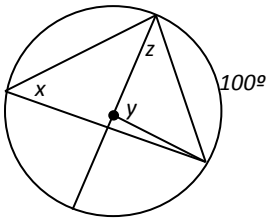
A. $x = 50^\circ$; $y = 100^\circ$; $z = 50^\circ$

B. $x = 45^\circ$; $y = 90^\circ$; $z = 45^\circ$

C. $x = 50^\circ$; $y = 100^\circ$; $z = 40^\circ$

D. $x = 40^\circ$; $y = 100^\circ$; $z = 40^\circ$

E. $x = 100^\circ$; $y = 100^\circ$; $z = 50^\circ$

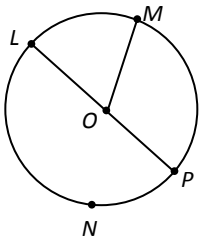


Given the circle shown, name the following:

A minor arc: _____

A major arc: _____

A diameter: _____



Draw a chord and label it AB.

Shade in a sector.

21.2

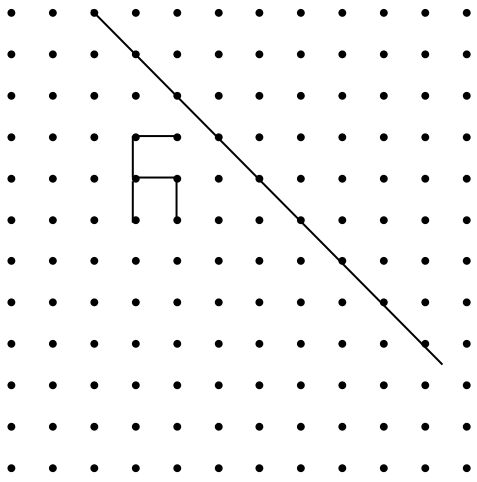
Imagine a kidney-shaped swimming pool with a uniform water depth of 3 ft. This pool can be considered a cylinder.

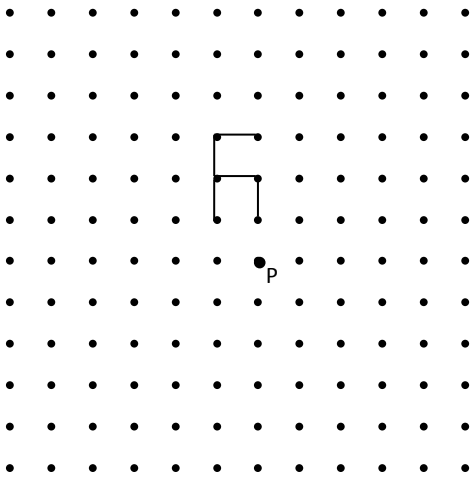
Name one way that this shape and a right circular cylinder are alike.

Name one way this shape and a right circular cylinder are different.

22.1

Note the "toothpick" figure on the first dot grid. On the same grid, draw an image of the figure for a reflection in the line shown. On the second grid, draw an image of the figure for a 90º rotation about point P in a counter-clockwise direction.





22.2

On the dot grid below, carefully sketch the image of the quadrilateral *ABCD* for a translation that maps with vector *w*. Label the image $A'B'C'D'$.