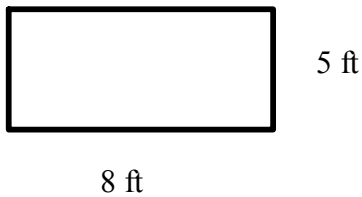


10-1 Finding Perimeter (Page 500)

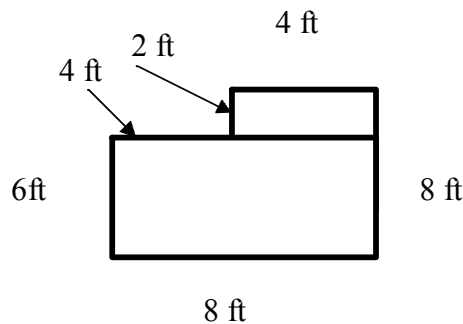
- The **perimeter** of the figure is the distance around it.
- To find the perimeter of any object or polygon = add up all of the side lengths
 - Do not forget a label
 - If it is a regular polygon, you may multiple one side length by the total number of sides

Ex # 1)



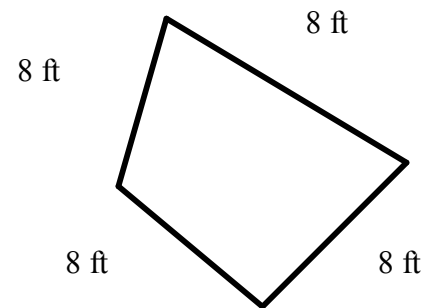
Perimeter _____

Ex # 2)



Perimeter _____

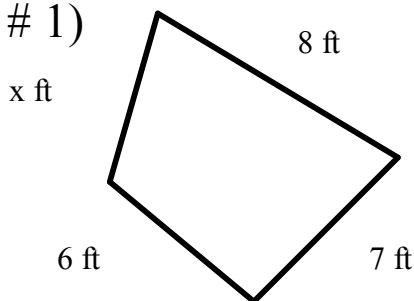
Ex # 3)



Perimeter _____

To find the missing side of a polygon when given the perimeter = add up all of the side lengths and subtract that sum from the perimeter

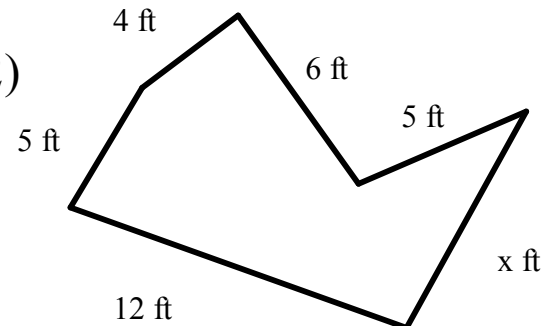
Ex # 1)



Perimeter = 26 feet

Side x = _____

Ex # 2)



Perimeter = 40 feet

Side x = _____

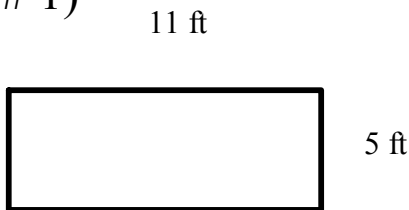
10-2 Finding Area (Page 504)

The area of a figure is amount of space it covers.

- **Perimeter** is distance around the outside vs. **area** is the space inside
- Area is measured in square units = ex. 14ft^2

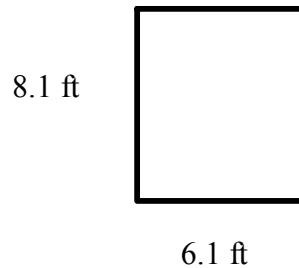
Area of a rectangle = $L \times W$ or lw

Ex # 1)



Area = _____

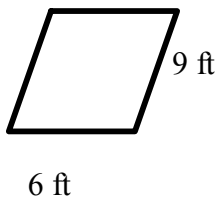
Ex # 2)



Area = _____

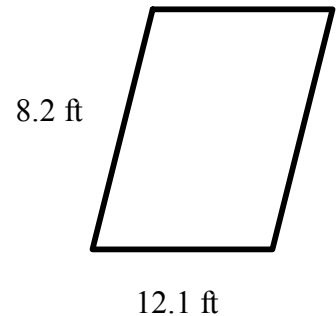
Area of a parallelogram = $B \times H$ or bh

Ex # 1)



Area = _____

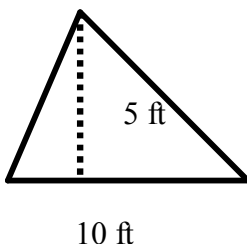
Ex # 2)



Area = _____

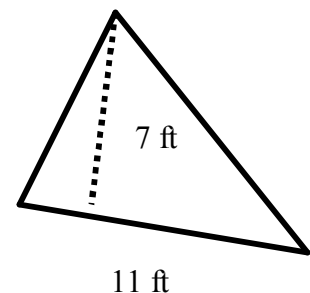
Area of a triangle = $\frac{1}{2} B \times H$ or $\frac{1}{2} bh$

Ex # 1)



Area = _____

Ex # 2)



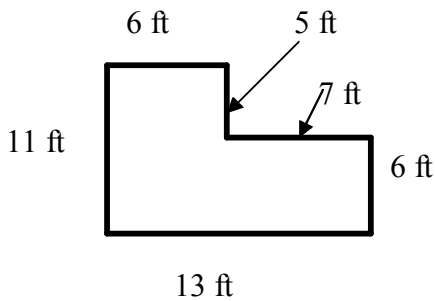
Area = _____

10-3 Break into Simpler Parts (Page 508)

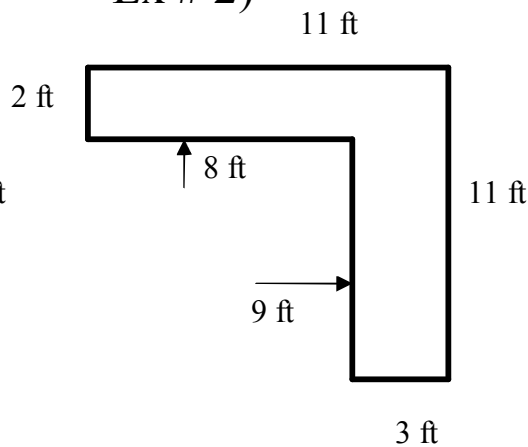
Finding the **area** of a composite figure = break into triangles or rectangles and find the area of both, then add up both areas to get the total area.

- Area is measured in square units = ex. 14ft^2
- Do not forget to add up the smaller areas

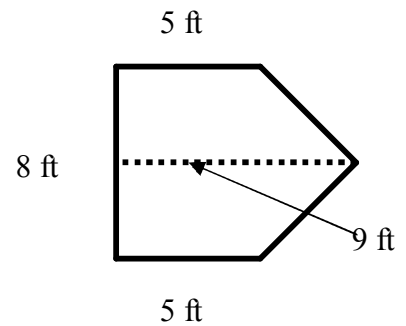
Ex # 1)



Ex # 2)



Ex # 3)



Area = _____

Area = _____

Area = _____

10-5 Circles (Page 516)

Radius = a line segment from the center of the circle to the outside of the circle (half of the **diameter**)

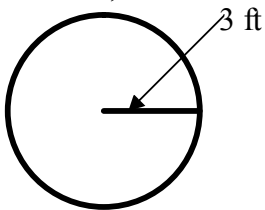
Diameter = a line segment from one side of the circle to other side of the circle going through the center of the circle (double the **radius**)

Circumference = the distance around the outside of the circle (circumference is the **perimeter** of the circle) 3

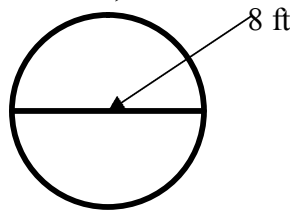
Circumference of a circle = $2 \pi r = 2 \times \pi \times r$ or $\pi d = \pi \times d$

- Be careful with radius and diameter

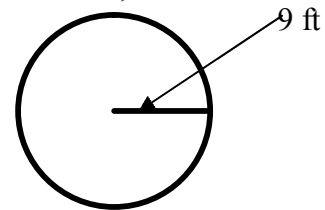
Ex # 1)



Ex # 2)



Ex # 3)

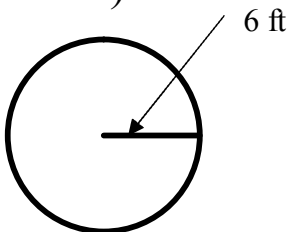


Circumference = _____ Circumference = _____ Circumference = _____

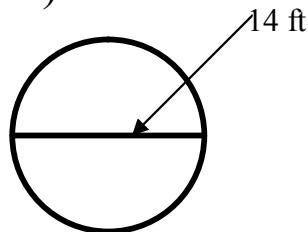
Area of a circle = πr^2 or $\pi \times r^2$

- Area is measured in square units = ex. 14ft^2
- Be careful with diameter and radius

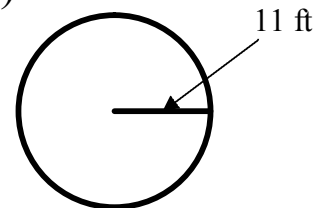
Ex # 1)



Ex # 2)



Ex # 3)



Area = _____ Area = _____ Area = _____

10-6 Solid Figures (Page 524)

Polyhedron = is a three dimensional object or solid figure with flat surfaces called **faces** that are **polygons**.

Face = a flat side of a **polyhedron** that is a **polygon**

Edges = two faces on a solid figure share a side it is called an edge

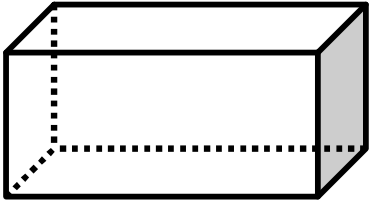
Vertex = a point at which three or more edges meet (plural – vertices)

Prism = is a **polyhedron** with two congruent parallel bases and other **faces** are all parallelograms. **Prisms** are named for the shape of its bases.

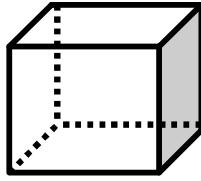
Cylinder = same as a **prism** however the bases are circular

Pyramid = one **polygon** shaped base and the other faces are triangles that come to a point. A **pyramid** is named for the shape of its base.

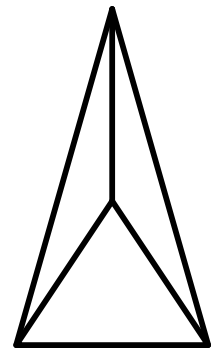
Cone = circular base and a curved surface that comes to a point. They are not **polyhedrons** because not every face is a **polygon**.



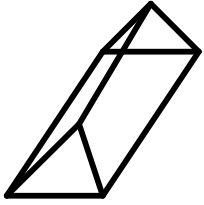
Rectangular Prism



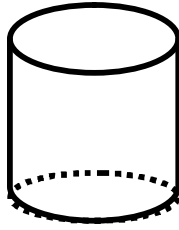
Cube



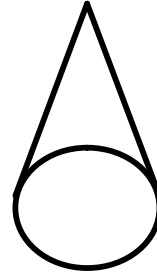
Triangular pyramid



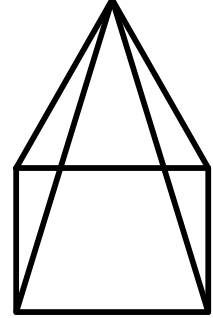
Triangular Prism



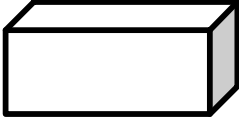
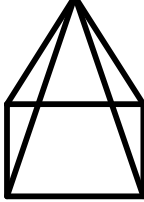
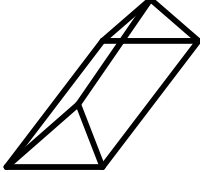
Cylinder



Cone



Square pyramid

			
Faces (F)			
Edges (E)			
Vertices (V)			
Name of Polyhedron			

Euler's Formula - $E = F + V - 2$

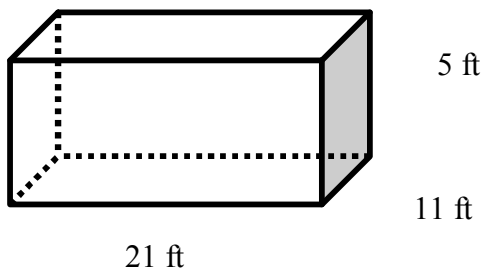
10-7 Surface Area (Page 530)

Surface Area – the sum of the areas of all of the sides (faces) of a polyhedron.

- **Area** is measured in square units = ex. 14ft^2
- **This is not finding the volume**

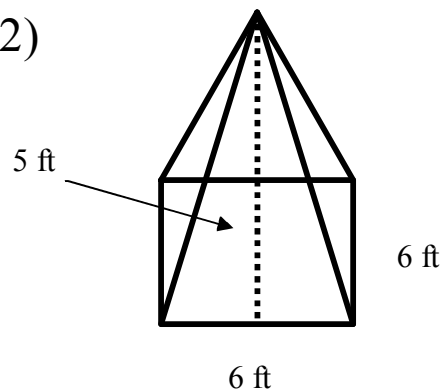
To find the **surface area** of a figure – find the area of each side and then add up all of the areas.

Ex # 1)



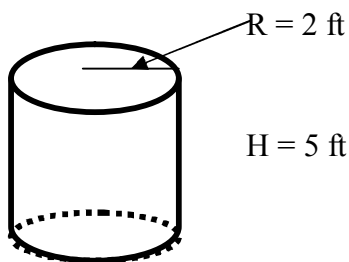
Surface Area = _____

Ex # 2)



Surface Area = _____

Ex # 3)



Surface Area = _____

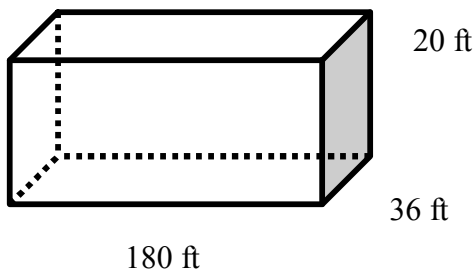
10-8 Finding Volume (Page 534)

Volume = number of cubic units needed to fill a space

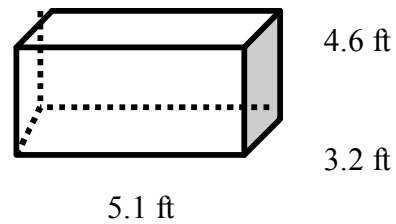
- Volume is measured in cubic units = ft^3

Find the **volume** of a rectangular prism = $L \times W \times H$ or lwh

Ex # 1)



Ex # 2)

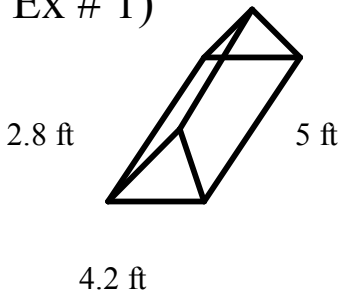


Volume = _____

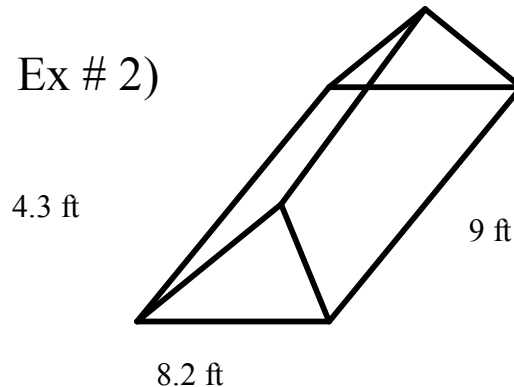
Volume = _____

Find the **volume** of a triangular prism = $b \times l \times h \div 2$

Ex # 1)



Ex # 2)



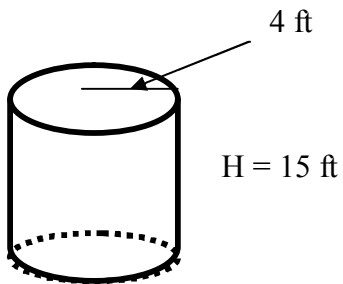
Volume = _____

Volume = _____

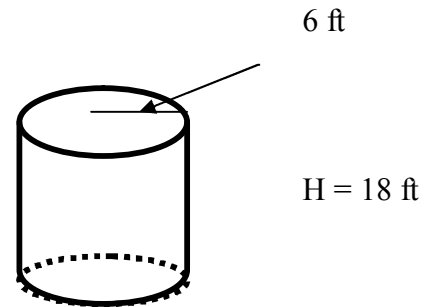
10-9 Volume of Cylinders (Page 538)

To find the **volume** of a cylinder $= \pi r^2 h$ or $\pi \times r^2 \times h$

Ex # 1)



Ex # 2)



Volume = _____

Volume = _____