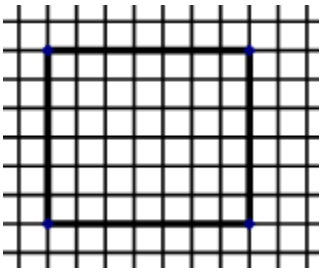
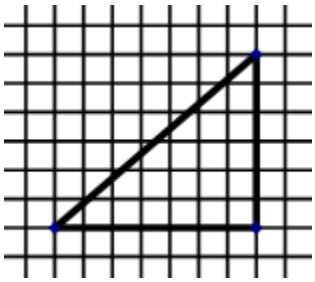
Name: _____ Date: _____ Period: _____

Unit 6 Day 6 - Areas of Right Triangles Classwork

1. Find the area of this rectangle:



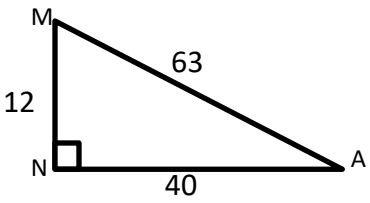
2. Find the area of this triangle:

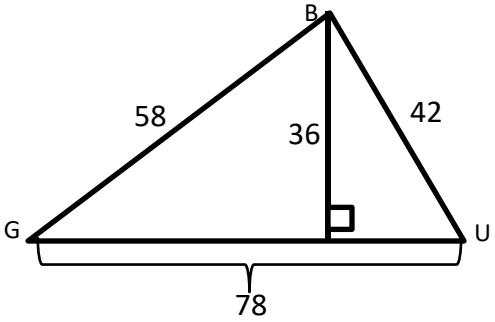


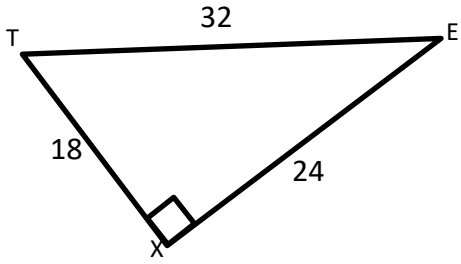
3. a) What formula is used to find the area of a triangle?

   b) What is the relationship between the base and the height of a triangle?

4. Identify the height and base for the triangles below. Label them as *h* and *b*.







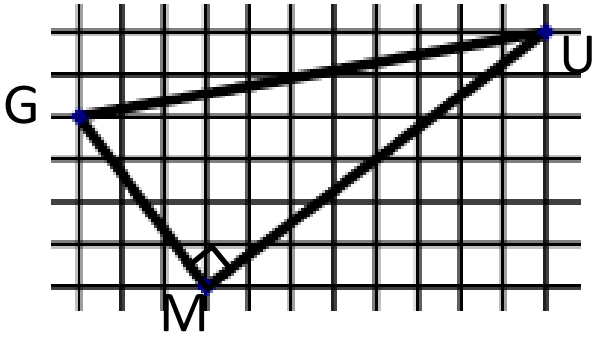
5. Find the area of each triangle.

ΔMAN: ΔBUG: ΔTEX:

6. To find the area of a triangle you need to find a height perpendicular to one of the sides (base.) In a right triangle, the base and height are the two sides that form the right angle.

Use the Pythagorean Theorem to find the length of each side of the triangle.

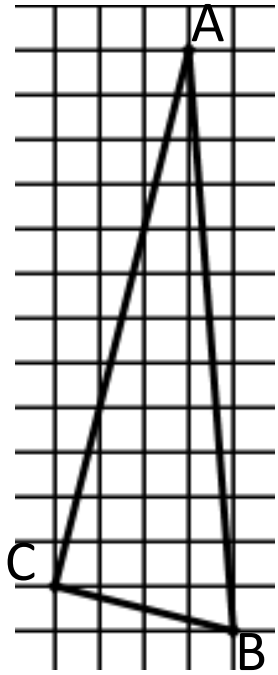
GU = UM= MG=



Which side could be used as the base?

Which side could be used as the height?

What is the exact area of this triangle?



7. a) Find the slope of $\overline{AB}$:

b) Find the slope of $\overline{BC}$:

c) Find the slope of $\overline{AC}$:

d) Is ΔABC a right triangle?

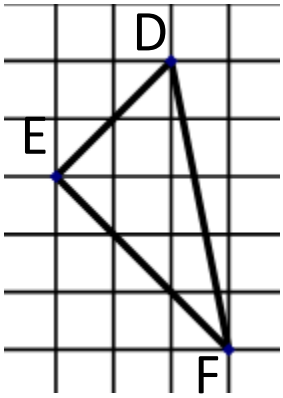
e) Which side of ΔABC could be used as the base?

f) Use the Pythagorean Theorem to find the length of that side:

g) Which side of ΔABC could be used as the height?

h) Use the Pythagorean Theorem to find the length of that side:

i) Find the exact area of ΔABC :



8. a) Find the slope of $\overline{ED}$:

b) Find the slope of $\overline{DF}$:

c) Find the slope of $\overline{EF}$:

d) Is ΔDEF a right triangle?

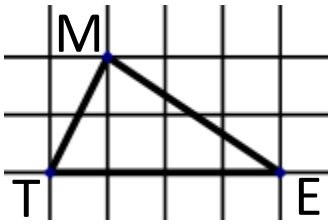
e) Which side of ΔDEF could be used as the base?

f) Find the length of that side:

g) Which side of ΔDEF could be used as the height?

h) Find the length of that side:

i) Find the area of ΔDEF :



9. a) Find the slope of $\overline{ME}$:

b) Find the slope of $\overline{ET}$:

c) Find the slope of $\overline{TM}$:

d) Is ΔMET a right triangle?

e) Find the area of ΔMET :