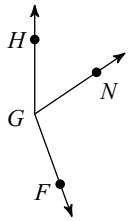
Math-2A Name_____

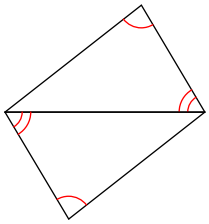
SM2-A HW #11-4 (Review)

1) $m\angle NGF = x + 114$, $m\angle HGN = x + 66$, and $m\angle HGF = 160°$. Find x.



Determine if the two triangles are congruent. If they are, state how you know.

2)

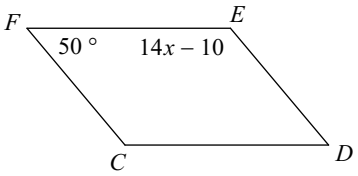


Find the midpoint of the line segment with the given endpoints.

3) $(7, 3)$, $(6, 0)$

Solve for x. Each figure is a parallelogram.

4)

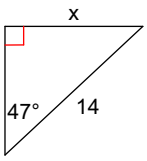


Find the distance between each pair of points.

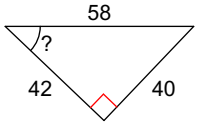
5) $(-1, 6)$, $(5, 4)$

Calculate the length of the missing side or angle to the nearest tenth.

6)

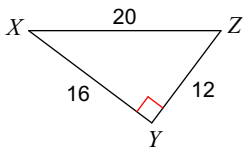


7)



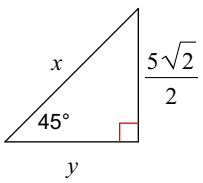
Find the value of each trigonometric ratio.

8) tan Z



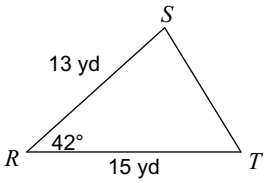
Find the missing side lengths. Leave your answers as radicals in simplest form.

9)



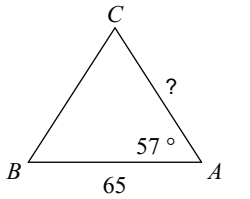
Find the area of each triangle to the nearest tenth.

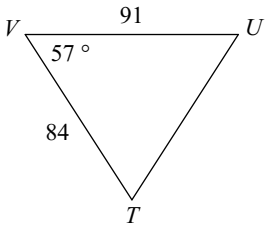
10)



Find the missing length. The triangles in each pair are similar.

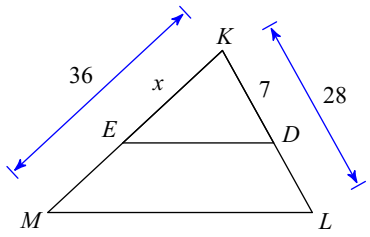
11) $\triangle VUT \sim \triangle ABC$





Solve for *x*. The triangles in each pair are similar.

12)



Perform the indicated operation.

13) $f(x) = 3x^3 + 2x$
$g(x) = x + 2$
Find $(f + g)(x)$

14) $h(x) = 3x + 3$
$g(x) = x + 3$
Find $(h - g)(x)$

15) $h(a) = a - 5$
$g(a) = -3a + 4$
Find $(h - g)(-3)$

16) $g(a) = a - 2$
$h(a) = 4a - 4$
Find $(g - h)(-8)$

17) $h(x) = 3x^2 - x$
Find $(h \circ h)(x)$

18) $g(x) = 2x + 1$
$h(x) = x^3 - 3$
Find $(g \circ h)(x)$

19) $h(x) = -3x$
$g(x) = 2x + 4$
Find $(h \circ g)(-3)$

20) $g(x) = 2x$
$h(x) = x + 3$
Find $(g \circ h)(-4)$