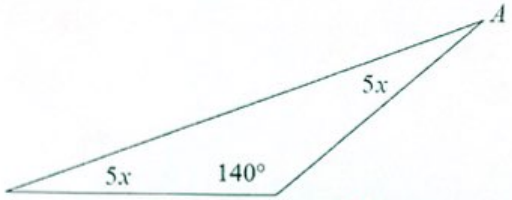
Secondary Math 2 Unit 2 Review Name: KEY Period: _____

1-2 Find the measure of angle A

1.



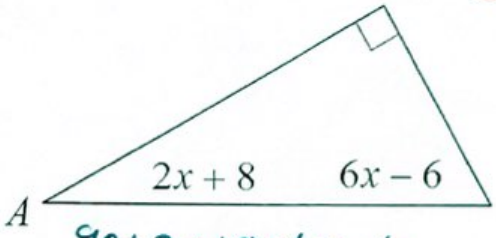
$5x + 5x + 140 = 180$

$10x = 40$

$x = 4$

$m\angle A = 20°$

2.



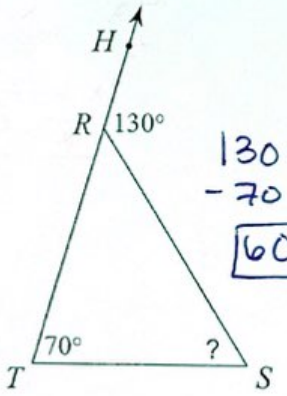
$90 + 2x + 8 + 6x - 6$

$92 + 8x = 180$

$8x = 88$

$x = 11$ $m\angle A = 30$

3. Find $m\angle S$

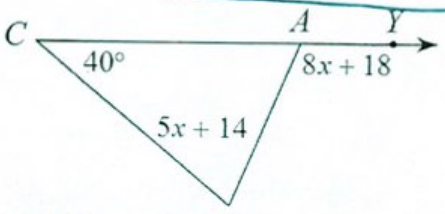


$130 = 70 + x$

$-70 \quad -70$

$60 = x$

4. Find $m\angle B$

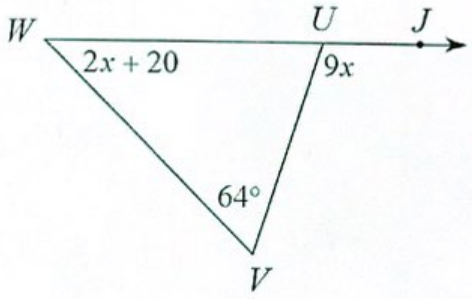


$8x + 18 = 40 + 5x + 14$

$-3x = -36$

$x = 12$ $m\angle B = 76°$

5. Find $m\angle W$.



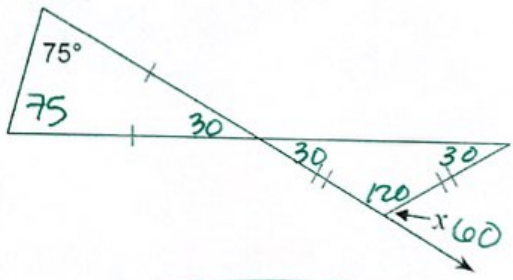
$9x = 2x + 20 + 64$

$7x = 84$

$x = 12$

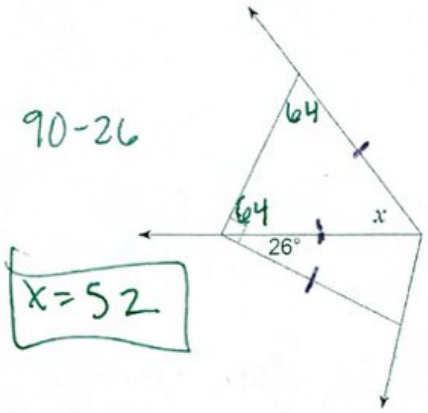
$m\angle W = 44$

6. Find measure of $\angle x$.



$x = 60$

7. Find measure of $\angle x$.



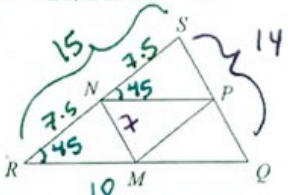
90-26

x=52

8. Given that points N, P, & M are mid points, and given $\overline{NM} = 7, \overline{RQ} = 18, \angle SNP = 45^o$

a. Find the length of NP

$\frac{1}{2}18 = 9$



b. Given that $\overline{SN} = 7.5$, Find the perimeter of ΔRSQ

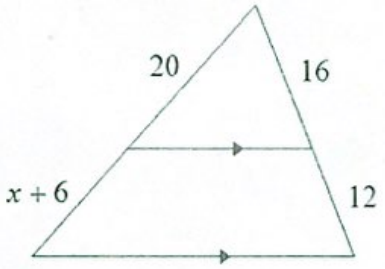
SQ = 2(7) = 14

15+14+18 = 47.

c. Find ∠SRQ

∠45°

9. Solve for x.

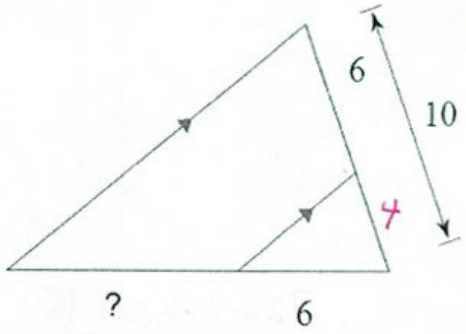


$\frac{20}{x+6} = \frac{16}{12}$

20(12) = 16(x+6)

x = 9

10. Find the missing side length.

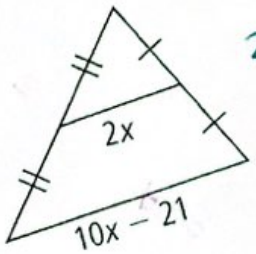


$\frac{4}{6} = \frac{6}{?}$

4(?) = 36

? = 9

11. Solve for x.



midsegment theorem

2(2x) = 10x − 21

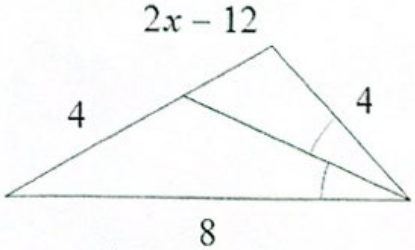
4x = 10x − 21

−10x −10x

−6x = −21

x = 3.5

12. Solve for x.

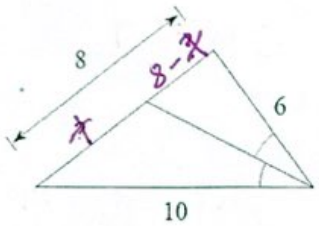


$\frac{4}{2x-12} = \frac{8}{4}$

16 = 8(2x−12)

x = 7

13. Find the missing side length.



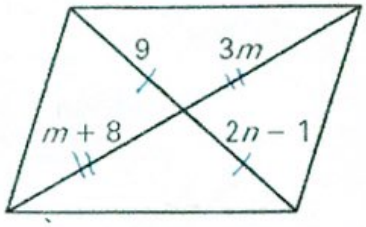
$\frac{6}{8-x} \times \frac{10}{x}$

$6x = 80 - 10x$

$16x = 80$

$x = 5$

14. Given the parallelogram, solve for m and n.



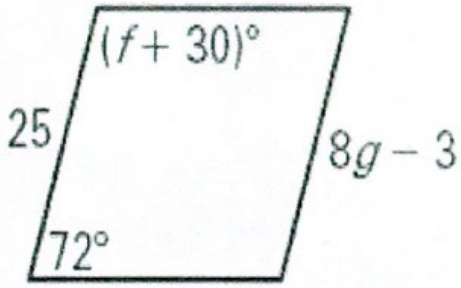
$3m = m + 8$

$m = 4$

$9 = 2n - 1$

$n = 5$

15. Given the parallelogram, solve for f and g.



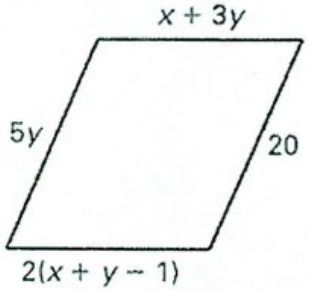
$72 + f + 30 = 180$

$f = 78$

$25 = 8g - 3$

$g = 3.5$

16. Given the parallelogram, solve for x and y.



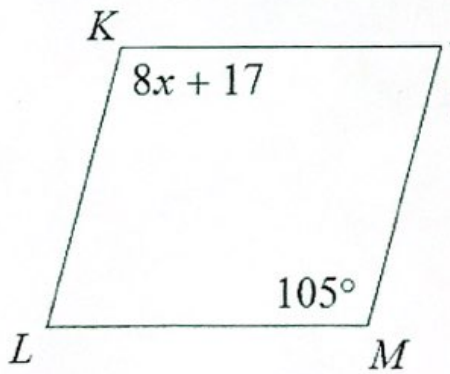
$5y = 20$

$y = 4$

$2x + 8 - 1 = x + 12$

$x = 5$

17. Given the parallelogram, Solve for x and find $m\angle L$.



$8x + 17 = 105$

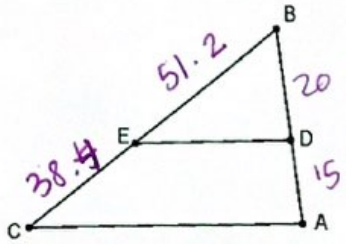
$-17 \quad -17$

$x = 11$

$m\angle L = 75°$

$180 - 105 = 75$

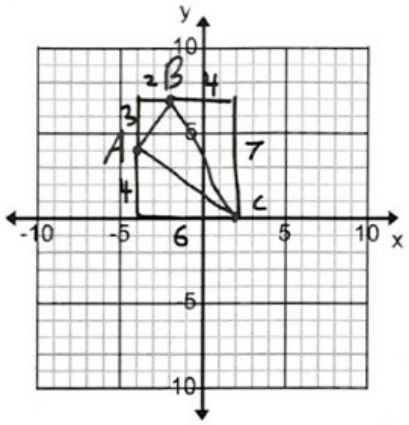
18. BE = 51.2, EC = 38.4, DA = 15, BD = 20. Is $\overline{AC} \parallel \overline{DE}$? Justify.



$\frac{51.2}{38.4} = \frac{20}{15}$

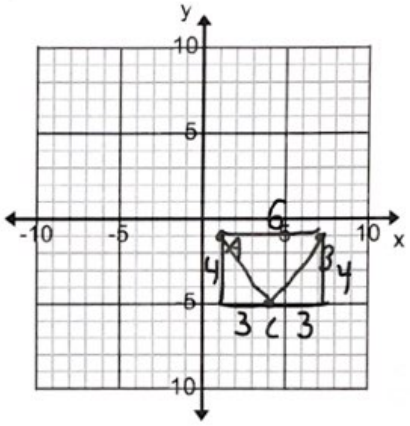
$1.3 = 1.3$ ✓ yes its parallel.

19. Given the vertices
$A(-4,4), B(-2,7), C(2,0)$ Classify the triangle as scalene, isosceles, or equilateral. Is the triangle a right triangle? Explain.



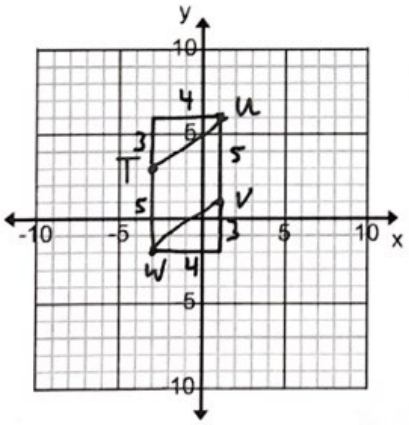
Scalene Right

20. Given the vertices
$A(1,-1), B(7,-1), C(4,-5)$ Classify the triangle as scalene, isosceles, or equilateral. Is the triangle a right triangle? Explain.



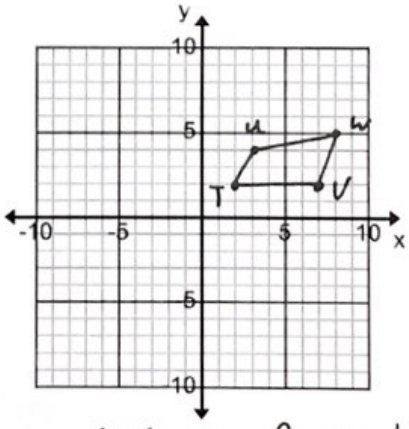
Isosceles

21. What is the most precise classification of the quadrilateral formed by the given vertices:
$T(-3,3), U(1,6), V(1,1), and W(-3,-2)$
Show your work.



Rhombus

22. Prove or disprove that the given vertices form a parallelogram.
$T(2,2), U(3,4), V(7,2), and W(8,5)$.
Show your work.



Not a parallelogram