

GEOMETRY (SECTION 6.3)

7. $3x = 4x - 5$

$x = 5$

8. $2x = 4$ $y - 1 = 2y - 7$

$x = 2$

$y = 6$

9. $3x = 4x - 21$ $3y = y + 78$

$x = 21$

$2y = 78$

$y = 39$

10. $3x + 1 = 6x - 4$

$3x = 5$

$x = \frac{5}{3}$

11. $5x - 8 = 2x + 7$

$3x = 15$

$x = 5$

12. $4x - 1 = x + 38$

$3x = 39$

$x = 13$

13. Yes, both pairs of opposite sides are congruent.

14. No, only one diagonal is bisected.

15. Yes, both pairs of opposite angles are congruent.

22. $3x + 10 + 8x + 5 = 180$

$11x + 15 = 180$

$11x = 165$

$x = 15$

$8x + 5 = 5y$

$8(15) + 5 = 5y$

$120 + 5 = 5y$

$125 = 5y$

$y = 25$

23. $2y + 2 = 3y - 9$

$y = 11$

$3x + 6 = y + 4$

$3x + 6 = 11 + 4$

$3x + 6 = 15$

$3x = 9$

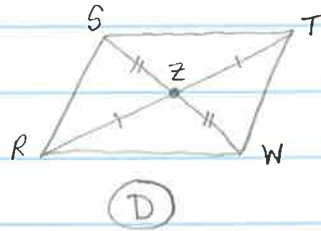
$x = 3$

24. $2x + 16 = 4x - 33$

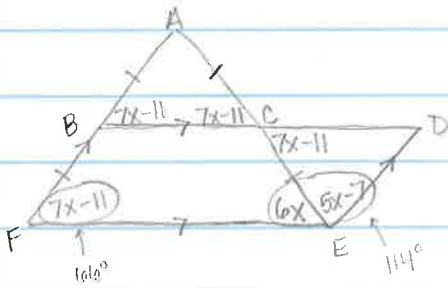
$2x = 48$

$x = 24$

29.



31.



(A) $7x - 11 = 6x$

$x = 11$

(B) Yes, \angle s are supplementary.

(C) Yes, opposite sides are parallel.