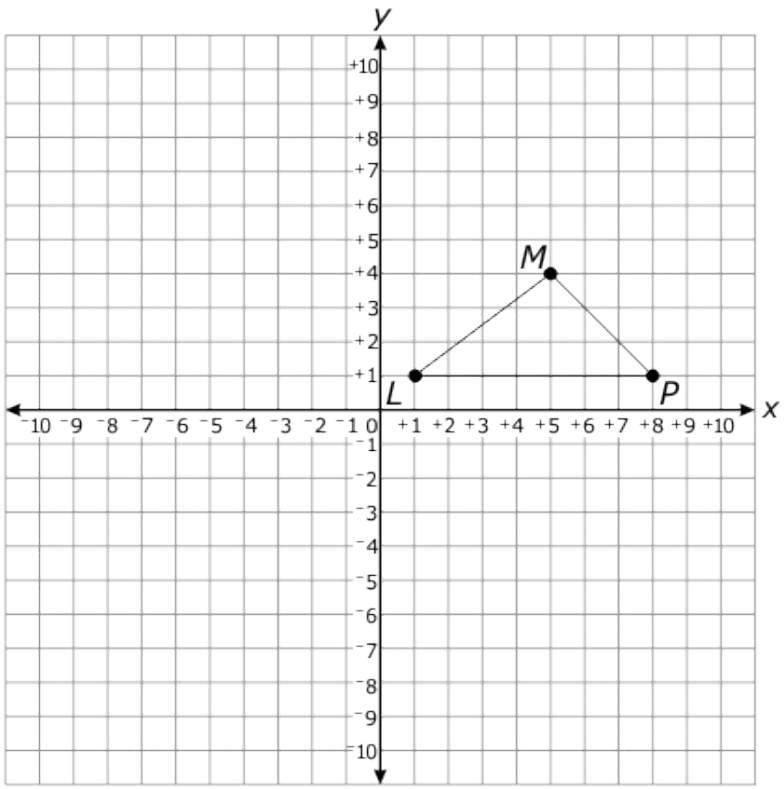
TEST NAME: **Unit 1 Rigid Transformations & Congruence (LYNCH)**
TEST ID: **2607022**
GRADE: **08 - Eighth Grade**
SUBJECT: **Mathematics**
TEST CATEGORY: **My Classroom**

Student: _____

Class: _____

Date: _____

1. Triangle *MLP* will be rotated 180° clockwise about the origin.



What will be the coordinates of *M'*?

A. $(^{-}5, ^{-}4)$

B. $(^{-}5, 4)$

C. $(^{-}4, ^{-}5)$

D. $(4, ^{-}5)$

2. Triangle *PQR* is drawn in quadrant III and then reflected over the *y*-axis. What can be inferred about the coordinates for *P'Q'R'*?

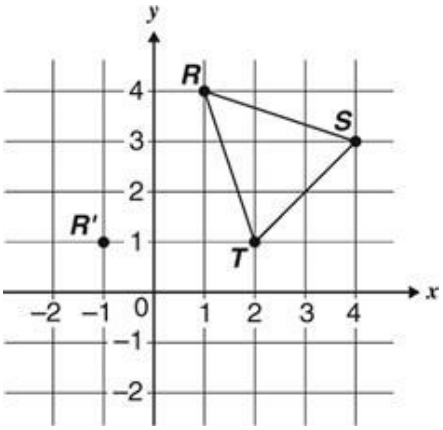
A. The *x*- and *y*-coordinates will be positive.

B. The *x*- and *y*-coordinates will be negative.

C. The *x*-coordinates will be negative, and the *y*-coordinates will be positive.

D. The *x*-coordinates will be positive, and the *y*-coordinates will be negative.

3. **Triangle *RST* is translated, resulting in Point $_{R'}$ as the image of Point *R*. What are the coordinates of the image of *T*?**



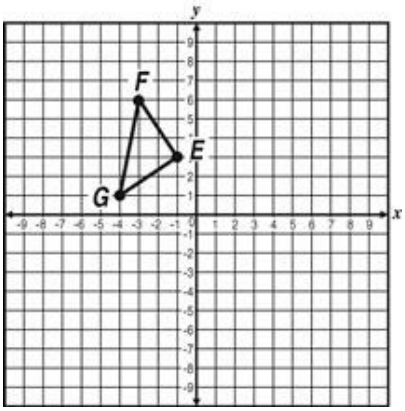
A. (–2, 0)

B. (–1, –1)

C. (0, –2)

D. (2, 0)

4. **The vertices of Triangle *EFG*, which is shown below, are** $E(-1, 3), F(-3, 6),$ **and** $G(-4, 1).$



If Triangle *EFG* is reflected over the *x*-axis, what are the new coordinates of Point *G*?

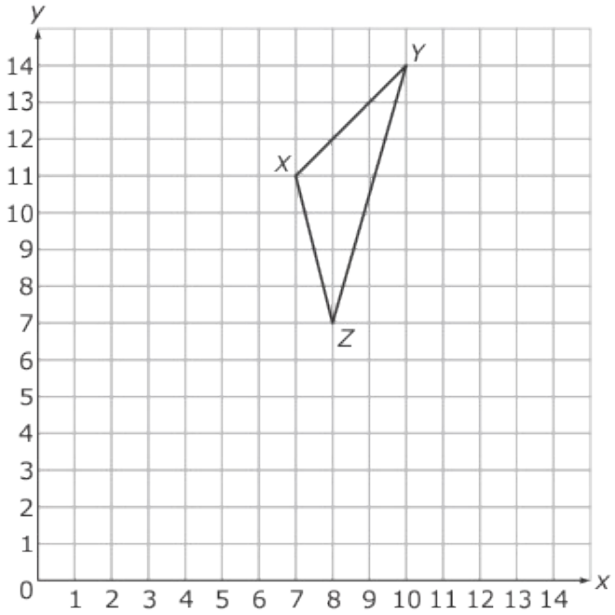
A. $(4, 1)$

B. $(4, -1)$

C. $(-4, 1)$

D. $(-4, -1)$

5. $\triangle XYZ$ will be translated so that the coordinates of X' are (5, 11).



What will be the coordinates of Z'?

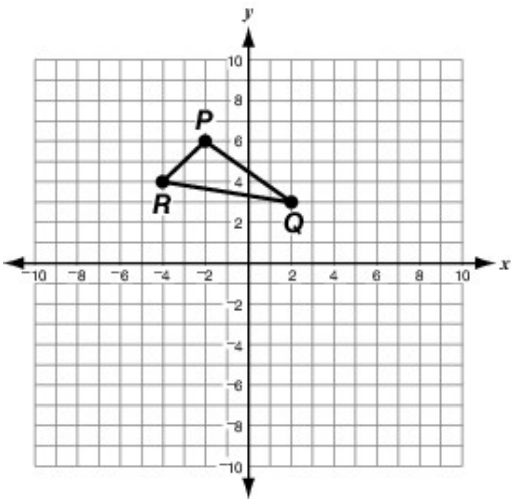
A. (5, 8)

B. (6, 7)

C. (7, 6)

D. (8, 5)

6. Triangle *PQR*, shown below, is reflected across the *y*-axis and then translated 5 units down and 4 units left.



What will be the new coordinates of point *Q*, after triangle *PQR* has been transformed?

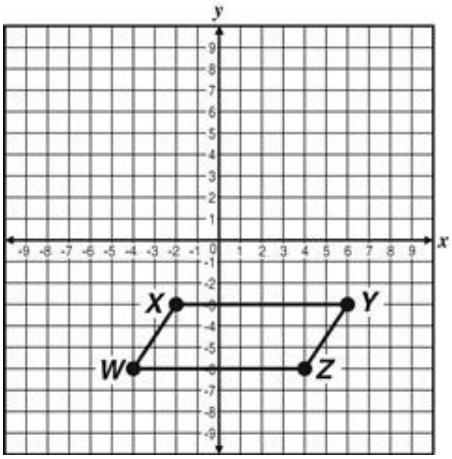
A. $(-6, -2)$

B. $(-2, -2)$

C. $(-2, 3)$

D. $(2, -8)$

7. **If *WXYZ* is translated 4 units to the left and 6 units up, which point will be located at the origin?**



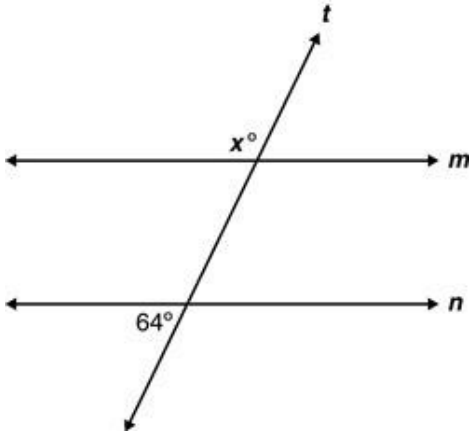
A. W

B. X

C. Y

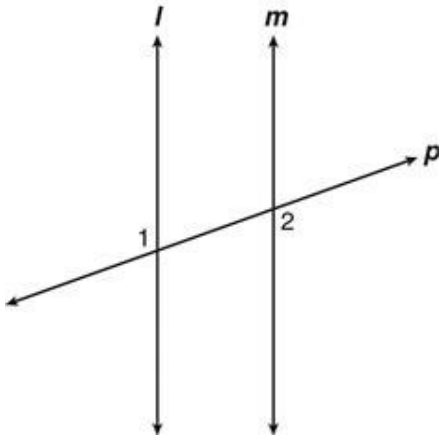
D. Z

8. **In the diagram below, transversal *t* intersects parallel lines *m* and *n*.**



What is the value of *x*?

9. **In the figure below, lines *l* and *m* are parallel lines cut by transversal line *p*.**



Jackie said that if $m\angle 1 = 110°$, then $m\angle 2 = 110°$ as well. Which of the following justifies Jackies statement?

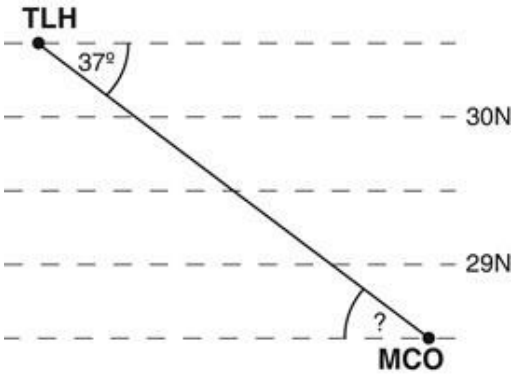
A. Alternate exterior angles are congruent.

B. Alternate interior angles are congruent.

C. Corresponding angles are congruent.

D. Vertical angles are congruent.

10. **This map shows that the airports in Tallahassee (TLH) and Orlando (MCO) lie on parallel latitude lines. The flight path from Tallahassee to Orlando forms a 37° angle with the latitude line through Tallahassee.**



If the same flight path is used for the return trip, which angle will be formed by the flight path and the latitude line through Orlando?

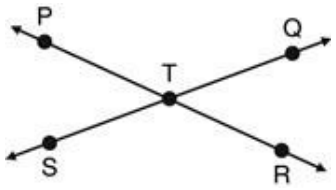
A. 37°

B. 53°

C. 127°

D. 143°

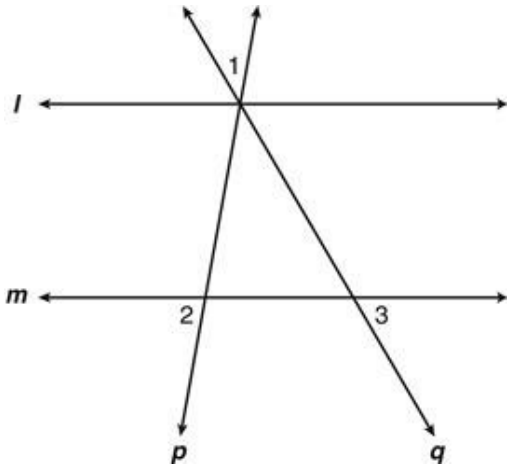
11. **In the figure below,** $m \angle PTS = 43°$.



What is $m \angle QTR$?

A. 43°
B. 47°
C. 133°
D. 137°

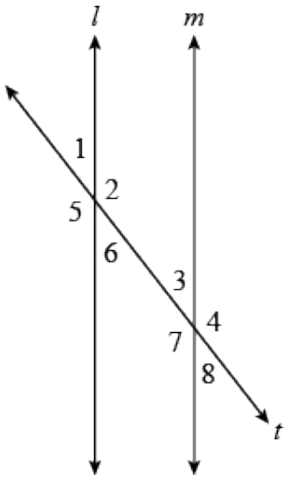
12. **In this diagram, Lines *l* and *m* are parallel to each other,** $m \angle 1 = 40°$ **and** $m \angle 2 = 80°$.



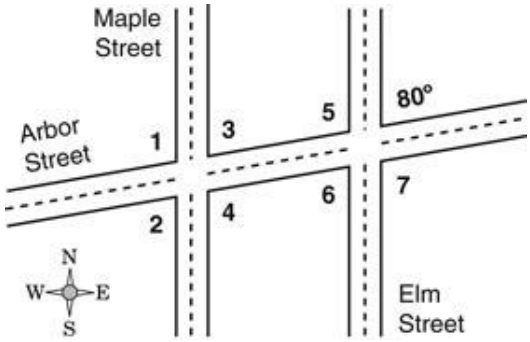
What is the measure of $\angle 3$?

A. 40°
B. 60°
C. 80°
D. 100°

13. **Given: $l \parallel m$ and t is a transversal. Select all angles that are congruent to $\angle 3$.**



14. **Maple Street and Elm Street are parallel to each other and both intersect Arbor Street.**



Which statement is NOT true?

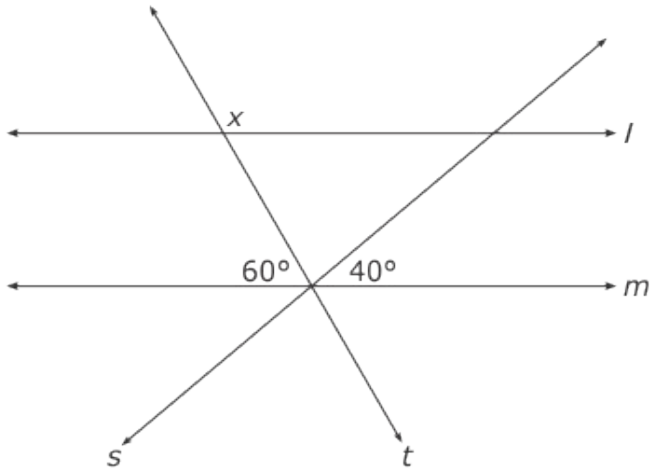
A. $m\angle 1 = m\angle 5$

B. $m\angle 3 = m\angle 6$

C. $m\angle 2 = 80°$

D. $m\angle 4 = 80°$

15. Lines *l* and *m* are parallel to one another and cut by transversals *s* and *t*.



What is the value of *x*?

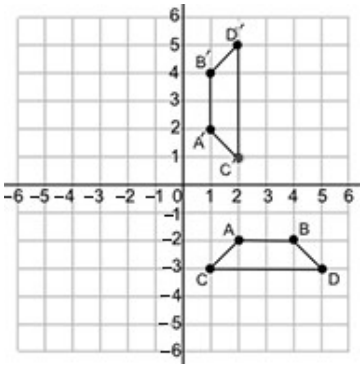
A. 40°

B. 80°

C. 120°

D. 140°

16. Identify all the possible rotations that could have been used to create Trapezoid A'B'C'D'. Choose all that apply



90º Clockwise

90º Counter Clockwise

180º Counter Clockwise

270º Clockwise

360º Clockwise

Possible Single Rotations