Coordinate Geometry Quiz Review

1. Determine the midpoint of the segment with endpoints (–10, –11) and (8, –17).

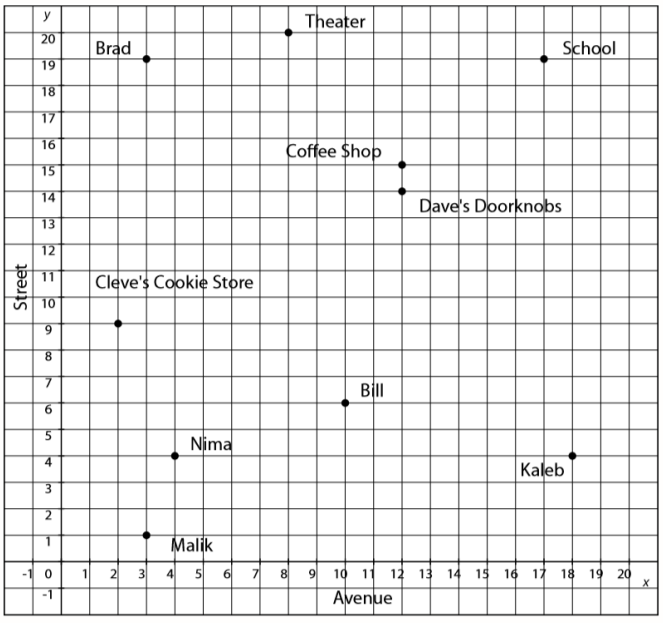
2. Determine the point with a ratio that is 3:1 the distance from the endpoint (–6, –16) of the segment with endpoints (34, 0) and (–6, –16).

3. Determine the point that is 1/3 the distance from the endpoint (6, 24) of the segment with endpoints (–9, –18) and (6, 24)

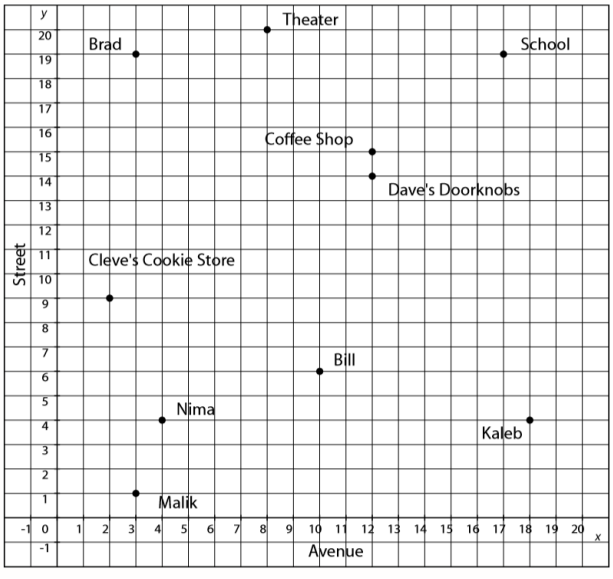
4. Find the coordinates of the second endpoint given one endpoint and the midpoint of the segment.

Endpoint (–10, 3) and midpoint (3, 4)

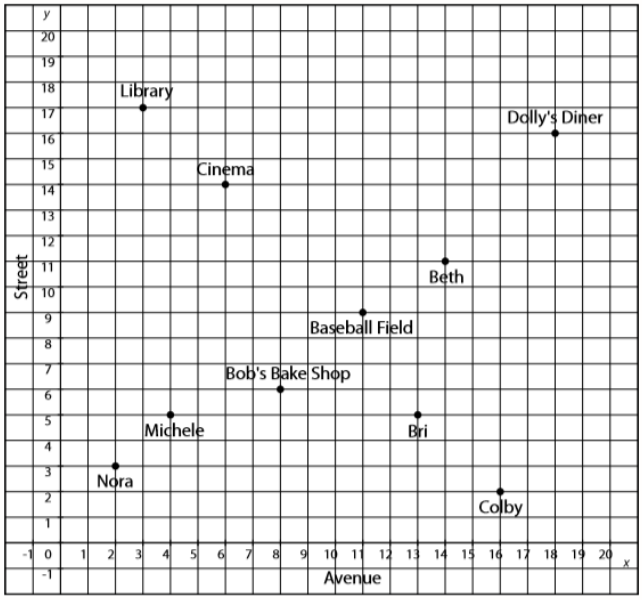
5. Luis works at a theater on 8th Avenue and 20th Street. Kaleb lives at the corner of 18th Avenue and 4th Street. What is the intersection that is midway between them?



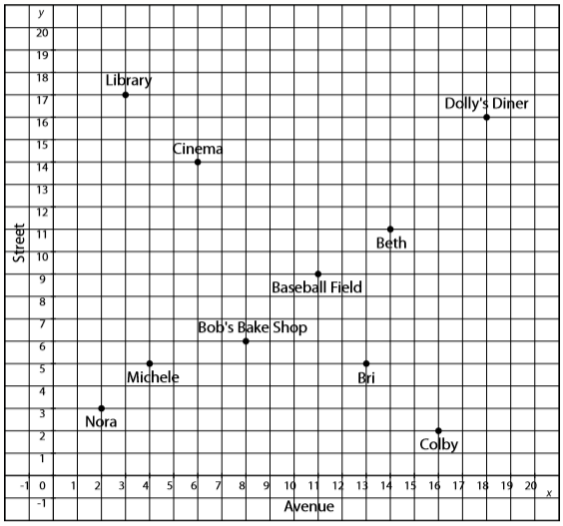
6. Malik and Brad both live on 3rd Avenue. Malik lives at the corner of 1st Street, and Brad lives at the corner of 19th Street. 2/3 the distance from Malik's apartment to Brad's apartment is a market. Where is the market?



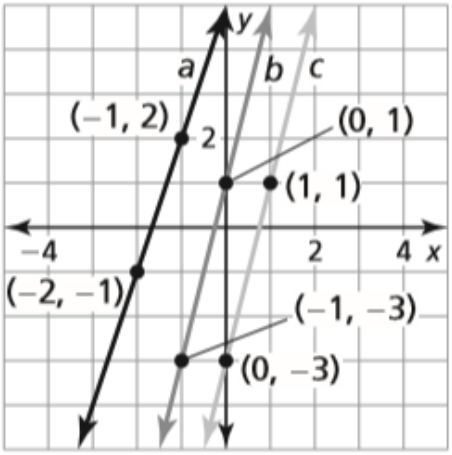
7. What is the distance between the cinema and the library?



8. Bob's Bake Shop is located at the corner of 8th Avenue and 6th Street. Dolly's Diner is located at the corner of 18th Avenue and 16th Street. Located 4/5 of the distance from Bob's Bake Shop is the bank. Where is the bank?



9. Determine which of the lines, if any, are parallel. Explain.



10. Determine which of the lines, if any, are parallel. Explain.

Line a passes through (-4,-1) and (2,2).
Line b passes through (-5,-3) and (5,1)
Line c passes through (-2,-3) and (2,-1).

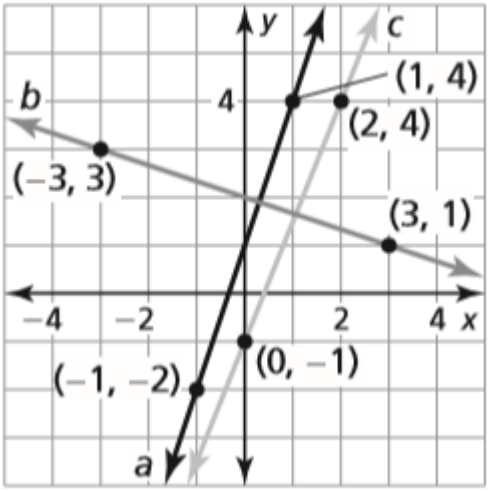
11. Determine which of the lines, if any, are parallel. Explain.

Lina a: $5y - x = 4$
Line b: $5y = x + 7$
Line c: $5y - 2x = 5$

12. Write an equation of the line that passes through the given point and is parallel to the given line.

$$(3, -1);\ y = \frac{1}{3}x - 3$$

13. Determine which of the lines, if any, are perpendicular. Explain.



14. Determine which of the lines, if any, are perpendicular. Explain.

Line a passes through (-2,4) and (1,1)
Line b passes through (2,1) and (4,4)
Line c passes though (1,-2) and (-1,4)

15. Determine which of the lines, if any, are perpendicular. Explain.

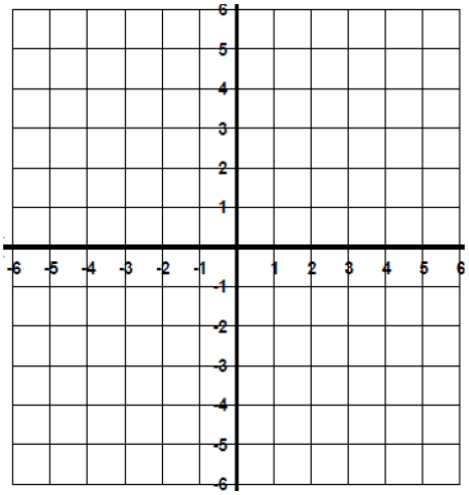
Line a: $y = \frac{3}{4}x + 1$
Line b: $-3y = 4x - 3$
Line c: $4y = -3x + 9$

16. Write an equation of the line that passes through the given point and is perpendicular to the given line.

$$(-2,2); y = \frac{2}{3}x + 2$$

17. Find the area of the polygon with the given vertices.

E(3, 1), F(3, −2), G(−2, −2)



18. Find the perimeter of the polygon with the given vertices.

G(2, 4), H(2, −3), J(−2, −3), K(−2, 4)