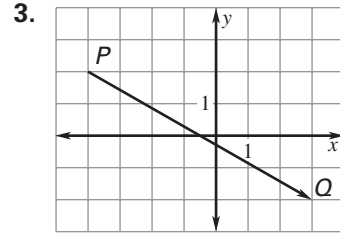
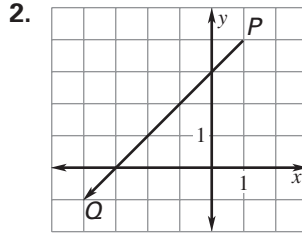
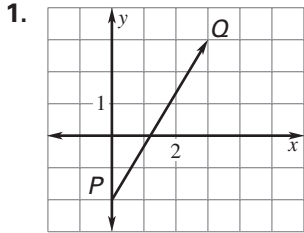


Practice B

For use with pages 573–580

Write the vector in component form. Find the magnitude of the vector. Round your answer to the nearest tenth.



Draw vector \overrightarrow{PQ} in a coordinate plane. Write the component form of the vector and find its magnitude. Round your answer to the nearest tenth.

4. $P(0, 0), Q(5, 2)$

5. $P(2, 5), Q(6, 1)$

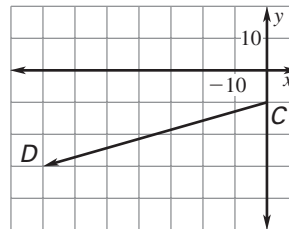
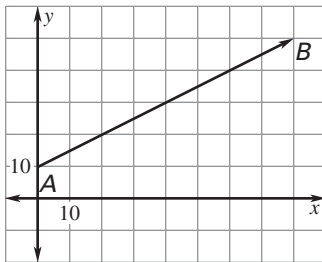
6. $P(-4, 2), Q(2, 0)$

7. $P(2, -3), Q(-1, 3)$

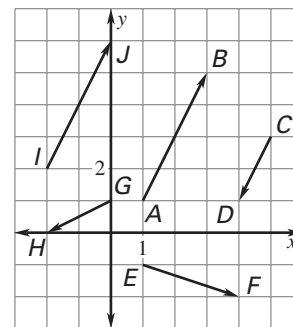
The given vector represents the velocity of a ship at sea. Find the ship's speed, rounded to the nearest mile per hour. Then find the direction the ship is traveling relative to the given direction.

8. Find direction relative to east.

9. Find direction relative to west.



In Exercises 10–13, use the diagram shown at the right.



10. Which vectors are parallel?
11. Which vectors have the same direction?
12. Which vectors are equal?
13. Name two vectors that have the same magnitude but different directions.