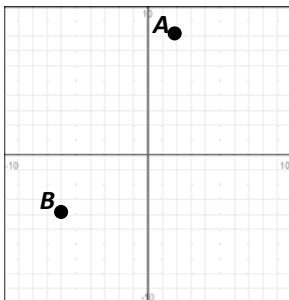


Distance and Midpoint Formulas

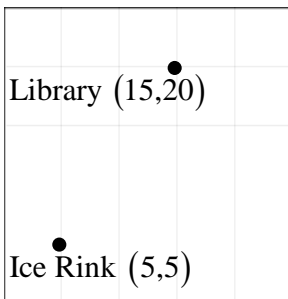
Directions: Find the distance between the two points. Write your answer in simplest form.

1. $(1,4)$ and $(-3,7)$
2. $(-2,1)$ and $(7,-6)$
3. $(2.5,4)$ and $(4,6)$

4. Find the length of \overline{AB} .



5. Find the distance between the ice rink and the library. Round your answer to the nearest integer.



Directions: Find the midpoint of the segment with the given endpoints.

6. $(-2,7)$ and $(8,-9)$
7. $(-3,-4)$ and $(8,12)$
8. $\left(-5\frac{1}{2}, 6\right)$ and $\left(-3\frac{1}{4}, 2\frac{3}{4}\right)$

Directions: M is the midpoint of \overline{AB} . Find the coordinates of B .

9. $A(2,1)$, $M(-3,5)$
10. $A(-6,0)$, $M\left(-3, 2\frac{1}{2}\right)$
11. $A\left(2\frac{1}{2}, 4\right)$, $M\left(2, -\frac{1}{2}\right)$