

1-4 Midpoints

Name: _____

Time Start: _____ Finish: _____

Total Time = _____

- _____ 1. What is the midpoint of a line that has endpoints at (2, 3) and (8, 5)?
- _____ 2. What is the midpoint of a line that has endpoints at (2, 3) and (4, 1)?
- _____ 3. What is the midpoint of a line that has endpoints at (14, -3) and (10, -1)?
- _____ 4. What is the midpoint of a line that has endpoints at (16, 3) and (8, -1)?
- _____ 5. What is the midpoint of a line that has endpoints at (5, -10) and (6, -10)?
- _____ 6. What is the midpoint of a line that has endpoints at (0, 3) and (-4, -3)?
- _____ 7. Point A is at (3, 7) and B is at (7, 1). If B is the midpoint of \overline{AC} , what are the coordinates of C?
- _____ 8. If X is the midpoint of \overline{CN} and $CX = 8n + 10$, what is CN? (Expression answer)
- _____ 9. If B is the midpoint of \overline{AC} and $AC = 4n - 2$, what is AB? (Expression answer)
- _____ 10. Point A is at (2, 12) and B is at (8, 10). If B is the midpoint of \overline{AC} , what are the coordinates of C?
- _____ 11. If X is the midpoint of \overline{CN} and $CX = 4n - 6$, what is CN? (Expression answer)
- _____ 12. If B is the midpoint of \overline{AC} and $AC = 6n + 20$, what is AB? (Expression answer)
- _____ 13. A line segment has an endpoint at (3, 2). If the midpoint of the line segment is (6, -2), what are the coordinates of the point at the other end of the line segment? (2008 SOL question)
- _____ 14. Point A is at (-4, 8) and B is at (-2, 12). If B is the midpoint of \overline{AC} , what are the coordinates of C?
- _____ 15. Point X is at (2, 12) and D is at (8, 10). If D is the midpoint of \overline{XP} , what are the coordinates of P?
- _____ 16. Point A is at (6, 1) and T is at (8, 10). If X is the midpoint of \overline{AT} , what are the coordinates of X?
- _____ 17. Point A is at (2, 12) and B is at (18, 10). If C is the midpoint of \overline{AB} , what are the coordinates of C?

Consider the pictures below. If a point is in the first quadrant, it will always be A. If in the 2nd, it will be B. If in the 3rd, it will be C. If in the 4th, it will be D. It would be wise to label the points before you start.

Figure 1

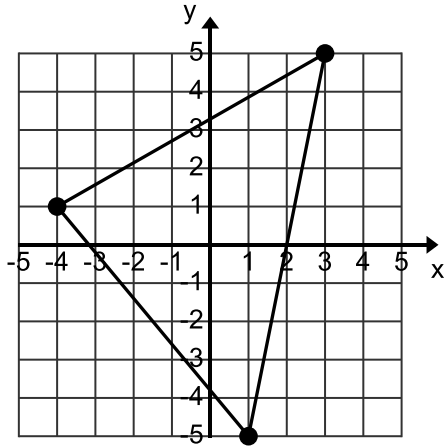
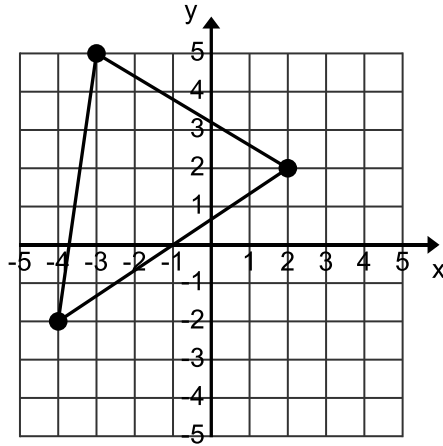


Figure 2



Find the midpoint of each given line segment.

_____ 18. \overline{AB} in Figure 1

_____ 19. \overline{AB} in Figure 2

_____ 20. \overline{AD} in Figure 1

_____ 21. \overline{AC} in Figure 2

_____ 22. \overline{BD} in Figure 1

_____ 23. \overline{BC} in Figure 2