Show all work neatly, and circle your answers.

Find the midpoint of each pair of coordinates.

- 1. (12, 43) and (30, 57)
- 2. (-24, 35) and (-38, 50)
- 3. (-8, 22) and (16, 10)

- 4. (-31, -25) and (-52, -42) 5. (18, -33) and (-2, 41)

In each pair of coordinates, M is the midpoint of \overline{AB} . Find the coordinates of B.

- 6. A(4, 10) and M(20, 35)
- 7. A(-6, -23) and M(-15, -17) 8. A(-80, 51) and M(-42, 27)

- 9. A(91, -37) and M(35, -79) 10. A(-0.7, -53.9) and M(21.4, -67.6)

In each pair of coordinates, find the point that is $\frac{2}{3}$ of the way from A to B.

- 11. A(3, 12) and B(6, 18)
- 12. A(4, -19) and B(40, 2)
- 13. A(-25, -37) and B(-41, 28)

In each pair of coordinates, find the point that is $\frac{3}{4}$ of the way from B to A.

- 14. A(4, 16) and B(12, 20)
- 15. A(24, -60) and B(52, -16)
- 16. A(-31, -15) and B(17, 22)

In each pair of coordinates, find the point that is $\frac{2}{5}$ of the way from A to B.

- 17. A(0, 10) and B(5, 25)
- 18. A(-35, -15) and B(40, -65) 19. A(23, -91) and B(-52, 57)