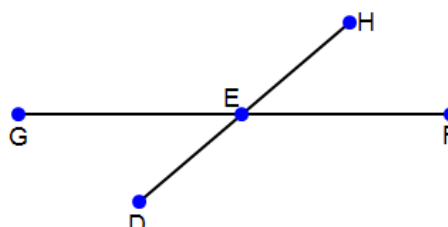**Name:** _____

Congruent Segments

In the given figure below, E is the midpoint $\overline{DH}$ .Find the value of x.

25) DE = 45, EH = 5x − 10

26) DE = 3x, EH = x + 6
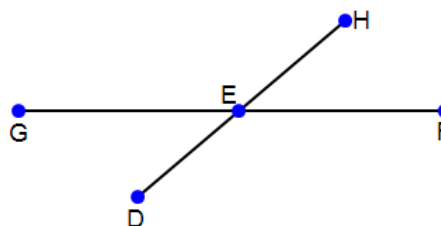
27) DE = 2x − 3, EH= 5x − 24

In the given figure below, find the value of y and then find GE and EH and state whether E is the midpoint of $\overline{GF}$.

28) GE = y, EF = y − 1, GF = 11

29) GE = 3y, GF = 7y − 4, EF = 24

30) GE = y + 2, GF = 20, EF = 2y − 6

31) GF = y + 6, EF = 2y − 4, GE = y

In the given figure, M is the midpoint of $\overline{AB}$. Find the coordinates of A, B or M for the given data.

32) A: p − 4; M: 8; B: p + 12

33) A: 3p − 1; M: 10; B: 2p + 6

34) A: p − 8; M: 10; B: p + 6

35) A: 2p − 2; M: 14; B: 4p + 6

36) A: −4; M: 6 − p; B: 2p − 4

37) A: 12 − 2p; M: p − 6; B: 16