

## Assignment

**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

1) Endpoint:  $\left(-2, 1\frac{5}{6}\right)$ , midpoint:  $\left(-1\frac{1}{3}, -\frac{3}{2}\right)$

2) Endpoint:  $\left(-\frac{2}{3}, \frac{1}{2}\right)$ , midpoint:  $\left(\frac{3}{5}, 2\frac{3}{5}\right)$

3) Endpoint:  $\left(0, -3\frac{1}{2}\right)$ , midpoint:  $\left(-\frac{2}{7}, 3\frac{1}{3}\right)$

4) Endpoint:  $\left(\frac{1}{3}, 3\right)$ , midpoint:  $\left(-\frac{1}{3}, 4\right)$

5) Endpoint:  $\left(2, \frac{5}{4}\right)$ , midpoint:  $\left(-1, -3\frac{2}{3}\right)$

6) Endpoint:  $\left(0, \frac{6}{7}\right)$ , midpoint:  $\left(1\frac{1}{2}, -\frac{11}{8}\right)$

7) Endpoint:  $\left(\frac{7}{4}, 4\frac{5}{6}\right)$ , midpoint:  $\left(-3\frac{5}{6}, 1\frac{3}{5}\right)$

8) Endpoint:  $\left(3\frac{1}{2}, \frac{1}{2}\right)$ , midpoint:  $\left(3\frac{1}{4}, -\frac{3}{2}\right)$

9) Endpoint:  $\left(4\frac{1}{3}, -1\frac{1}{6}\right)$ , midpoint:  $\left(-\frac{3}{2}, 3\frac{1}{3}\right)$

10) Endpoint:  $\left(-8\frac{1}{3}, -\frac{3}{2}\right)$ , midpoint:  $\left(1\frac{2}{7}, 3\frac{4}{5}\right)$

11) Endpoint:  $\left(-1\frac{1}{8}, -\frac{3}{2}\right)$ , midpoint:  $\left(\frac{5}{6}, -3\right)$

12) Endpoint:  $\left(-3\frac{5}{8}, 4\frac{2}{3}\right)$ , midpoint:  $\left(-2\frac{1}{4}, -1\frac{1}{3}\right)$

13) Endpoint:  $\left(4\frac{1}{8}, 2\right)$ , midpoint:  $\left(3\frac{7}{8}, 4\frac{3}{4}\right)$

14) Endpoint:  $\left(4\frac{7}{8}, -1\right)$ , midpoint:  $\left(1\frac{5}{6}, 3\frac{7}{8}\right)$

15) Endpoint:  $\left(3\frac{3}{7}, \frac{2}{7}\right)$ , midpoint:  $\left(-2, 4\frac{4}{7}\right)$

16) Endpoint:  $\left(1\frac{6}{7}, \frac{7}{5}\right)$ , midpoint:  $\left(\frac{7}{8}, -1\right)$



17) Endpoint:  $\left(\frac{1}{6}, 1\right)$ , midpoint:  $\left(\frac{5}{6}, -3\frac{1}{7}\right)$

18) Endpoint:  $\left(-1\frac{3}{7}, 8\right)$ , midpoint:  $\left(\frac{5}{3}, \frac{1}{2}\right)$

19) Endpoint:  $\left(3\frac{1}{6}, -\frac{3}{7}\right)$ , midpoint:  $\left(-1\frac{5}{8}, -\frac{7}{4}\right)$

20) Endpoint:  $\left(-6, -2\frac{1}{6}\right)$ , midpoint:  $\left(-\frac{10}{7}, -\frac{11}{6}\right)$

21) Endpoint:  $\left(3\frac{3}{5}, -1\frac{1}{2}\right)$ , midpoint:  $\left(-3\frac{2}{3}, \frac{8}{7}\right)$

22) Endpoint:  $\left(2\frac{1}{4}, -\frac{3}{4}\right)$ , midpoint:  $\left(-3\frac{5}{6}, -3\right)$

23) Endpoint:  $\left(-\frac{1}{2}, -1\frac{5}{6}\right)$ , midpoint:  $\left(\frac{1}{6}, -\frac{9}{8}\right)$

24) Endpoint:  $\left(\frac{3}{2}, 8\frac{1}{3}\right)$ , midpoint:  $\left(1\frac{5}{7}, \frac{1}{2}\right)$



## Answers to Assignment (ID: 1)

1)  $\left(-\frac{2}{3}, -4\frac{5}{6}\right)$

2)  $\left(1\frac{13}{15}, 4\frac{7}{10}\right)$

3)  $\left(-\frac{4}{7}, 10\frac{1}{6}\right)$

4)  $(-1, 5)$

5)  $\left(-4, -8\frac{7}{12}\right)$

6)  $\left(3, -3\frac{17}{28}\right)$

7)  $\left(-9\frac{5}{12}, -1\frac{19}{30}\right)$

8)  $\left(3, -3\frac{1}{2}\right)$

9)  $\left(-7\frac{1}{3}, 7\frac{5}{6}\right)$

10)  $\left(10\frac{19}{21}, 9\frac{1}{10}\right)$

11)  $\left(2\frac{19}{24}, -4\frac{1}{2}\right)$

12)  $\left(-\frac{7}{8}, -7\frac{1}{3}\right)$

13)  $\left(3\frac{5}{8}, 7\frac{1}{2}\right)$

14)  $\left(-1\frac{5}{24}, 8\frac{3}{4}\right)$

15)  $\left(-7\frac{3}{7}, 8\frac{6}{7}\right)$

16)  $\left(-\frac{3}{28}, -3\frac{2}{5}\right)$

17)  $\left(1\frac{1}{2}, -7\frac{2}{7}\right)$

18)  $\left(4\frac{16}{21}, -7\right)$

19)  $\left(-6\frac{5}{12}, -3\frac{1}{14}\right)$

20)  $\left(3\frac{1}{7}, -1\frac{1}{2}\right)$

21)  $\left(-10\frac{14}{15}, 3\frac{11}{14}\right)$

22)  $\left(-9\frac{11}{12}, -5\frac{1}{4}\right)$

23)  $\left(\frac{5}{6}, -\frac{5}{12}\right)$

24)  $\left(1\frac{13}{14}, -7\frac{1}{3}\right)$



## Assignment

**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

1) Endpoint:  $\left(\frac{3}{2}, \frac{9}{7}\right)$ , midpoint:  $\left(3\frac{1}{4}, -3\frac{3}{5}\right)$

2) Endpoint:  $\left(6, -\frac{1}{3}\right)$ , midpoint:  $\left(-\frac{1}{6}, 1\frac{3}{4}\right)$

3) Endpoint:  $\left(\frac{4}{3}, -1\frac{1}{5}\right)$ , midpoint:  $\left(-1\frac{1}{8}, 4\frac{5}{6}\right)$

4) Endpoint:  $(1, 2)$ , midpoint:  $\left(5\frac{1}{8}, -1\right)$

5) Endpoint:  $\left(-1, -\frac{7}{4}\right)$ , midpoint:  $\left(-\frac{1}{6}, 2\frac{7}{8}\right)$

6) Endpoint:  $\left(-\frac{3}{2}, \frac{1}{6}\right)$ , midpoint:  $\left(\frac{3}{2}, 2\frac{1}{8}\right)$

7) Endpoint:  $(0, 1)$ , midpoint:  $\left(-2, -2\frac{3}{7}\right)$

8) Endpoint:  $\left(-1, \frac{15}{8}\right)$ , midpoint:  $\left(-\frac{1}{4}, 2\frac{3}{5}\right)$

9) Endpoint:  $\left(-\frac{11}{7}, -2\frac{3}{5}\right)$ , midpoint:  $\left(-\frac{6}{7}, -\frac{1}{3}\right)$

10) Endpoint:  $\left(\frac{9}{8}, -2\right)$ , midpoint:  $\left(\frac{1}{5}, 1\right)$

11) Endpoint:  $\left(-\frac{1}{6}, 1\right)$ , midpoint:  $\left(4\frac{3}{4}, 3\frac{1}{4}\right)$

12) Endpoint:  $\left(-2\frac{1}{6}, 3\frac{5}{6}\right)$ , midpoint:  $\left(\frac{3}{4}, \frac{3}{4}\right)$

13) Endpoint:  $\left(-\frac{5}{3}, -\frac{5}{4}\right)$ , midpoint:  $\left(-\frac{10}{7}, \frac{3}{4}\right)$

14) Endpoint:  $\left(\frac{6}{7}, -2\frac{5}{6}\right)$ , midpoint:  $\left(-3, -\frac{7}{4}\right)$

15) Endpoint:  $\left(4\frac{2}{5}, -3\frac{2}{3}\right)$ , midpoint:  $\left(-1, -\frac{2}{3}\right)$

16) Endpoint:  $\left(3\frac{1}{5}, 1\frac{1}{8}\right)$ , midpoint:  $\left(\frac{5}{4}, \frac{3}{2}\right)$



17) Endpoint:  $\left(2\frac{3}{4}, 2\right)$ , midpoint:  $\left(4\frac{1}{8}, 1\frac{1}{3}\right)$

18) Endpoint:  $\left(\frac{4}{5}, \frac{3}{2}\right)$ , midpoint:  $\left(-\frac{1}{2}, -\frac{4}{5}\right)$

19) Endpoint:  $\left(-1\frac{1}{4}, 2\right)$ , midpoint:  $\left(\frac{1}{3}, 3\frac{1}{3}\right)$

20) Endpoint:  $\left(-2\frac{1}{3}, -\frac{1}{8}\right)$ , midpoint:  $\left(-\frac{6}{7}, 1\right)$

21) Endpoint:  $\left(-3\frac{2}{3}, 6\right)$ , midpoint:  $\left(-2\frac{1}{2}, \frac{1}{5}\right)$

22) Endpoint:  $\left(2\frac{1}{2}, -2\right)$ , midpoint:  $\left(2\frac{1}{6}, -\frac{9}{8}\right)$

23) Endpoint:  $\left(4\frac{1}{2}, -\frac{2}{3}\right)$ , midpoint:  $\left(-3\frac{1}{2}, \frac{11}{6}\right)$

24) Endpoint:  $\left(-1\frac{1}{2}, -3\frac{3}{8}\right)$ , midpoint:  $\left(-1\frac{2}{5}, 1\right)$



## Answers to Assignment (ID: 2)

1)  $\left(5, -8\frac{17}{35}\right)$

2)  $\left(-6\frac{1}{3}, 3\frac{5}{6}\right)$

3)  $\left(-3\frac{7}{12}, 10\frac{13}{15}\right)$

4)  $\left(9\frac{1}{4}, -4\right)$

5)  $\left(\frac{2}{3}, 7\frac{1}{2}\right)$

6)  $\left(4\frac{1}{2}, 4\frac{1}{12}\right)$

7)  $\left(-4, -5\frac{6}{7}\right)$

8)  $\left(\frac{1}{2}, 3\frac{13}{40}\right)$

9)  $\left(-\frac{1}{7}, 1\frac{14}{15}\right)$

10)  $\left(-\frac{29}{40}, 4\right)$

11)  $\left(9\frac{2}{3}, 5\frac{1}{2}\right)$

12)  $\left(3\frac{2}{3}, -2\frac{1}{3}\right)$

13)  $\left(-1\frac{4}{21}, 2\frac{3}{4}\right)$

14)  $\left(-6\frac{6}{7}, -\frac{2}{3}\right)$

15)  $\left(-6\frac{2}{5}, 2\frac{1}{3}\right)$

16)  $\left(-\frac{7}{10}, 1\frac{7}{8}\right)$

17)  $\left(5\frac{1}{2}, \frac{2}{3}\right)$

18)  $\left(-1\frac{4}{5}, -3\frac{1}{10}\right)$

19)  $\left(1\frac{11}{12}, 4\frac{2}{3}\right)$

20)  $\left(\frac{13}{21}, 2\frac{1}{8}\right)$

21)  $\left(-1\frac{1}{3}, -5\frac{3}{5}\right)$

22)  $\left(1\frac{5}{6}, -\frac{1}{4}\right)$

23)  $\left(-11\frac{1}{2}, 4\frac{1}{3}\right)$

24)  $\left(-1\frac{3}{10}, 5\frac{3}{8}\right)$



## Assignment

**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

1) Endpoint:  $\left(-1\frac{1}{2}, 1\frac{3}{5}\right)$ , midpoint:  $\left(1, -\frac{7}{6}\right)$

2) Endpoint:  $\left(-3\frac{1}{8}, -2\frac{1}{8}\right)$ , midpoint:  $\left(\frac{3}{4}, \frac{1}{6}\right)$

3) Endpoint:  $\left(-2\frac{5}{8}, \frac{4}{3}\right)$ , midpoint:  $\left(\frac{7}{4}, -\frac{7}{6}\right)$

4) Endpoint:  $\left(4\frac{5}{7}, 3\frac{5}{6}\right)$ , midpoint:  $\left(\frac{1}{2}, -1\frac{3}{4}\right)$

5) Endpoint:  $\left(-\frac{5}{6}, 4\right)$ , midpoint:  $\left(\frac{3}{2}, -3\frac{1}{6}\right)$

6) Endpoint:  $\left(2\frac{1}{8}, -2\frac{3}{4}\right)$ , midpoint:  $\left(-\frac{5}{3}, -\frac{1}{6}\right)$

7) Endpoint:  $\left(-\frac{1}{7}, -3\frac{5}{8}\right)$ , midpoint:  $\left(-\frac{11}{8}, 2\frac{2}{7}\right)$

8) Endpoint:  $\left(-\frac{3}{5}, 0\right)$ , midpoint:  $\left(2\frac{2}{3}, \frac{7}{4}\right)$

9) Endpoint:  $\left(-\frac{6}{5}, -\frac{5}{4}\right)$ , midpoint:  $\left(4\frac{1}{2}, 0\right)$

10) Endpoint:  $\left(-8, -2\frac{5}{6}\right)$ , midpoint:  $\left(-1, 1\frac{5}{6}\right)$

11) Endpoint:  $\left(-\frac{5}{3}, \frac{1}{2}\right)$ , midpoint:  $\left(4\frac{1}{4}, -2\frac{1}{2}\right)$

12) Endpoint:  $\left(-6, -2\frac{3}{4}\right)$ , midpoint:  $\left(\frac{11}{7}, \frac{1}{3}\right)$

13) Endpoint:  $\left(\frac{1}{2}, -\frac{1}{4}\right)$ , midpoint:  $\left(\frac{1}{6}, 2\right)$

14) Endpoint:  $\left(-\frac{6}{5}, -\frac{1}{6}\right)$ , midpoint:  $\left(-\frac{12}{7}, 1\right)$

15) Endpoint:  $\left(-\frac{5}{3}, \frac{4}{5}\right)$ , midpoint:  $(-1, -1)$

16) Endpoint:  $(0, -8)$ , midpoint:  $\left(-\frac{1}{4}, -\frac{2}{3}\right)$



17) Endpoint:  $\left(0, -6\frac{1}{3}\right)$ , midpoint:  $\left(4\frac{6}{7}, -\frac{1}{4}\right)$

18) Endpoint:  $\left(0, -1\frac{3}{4}\right)$ , midpoint:  $\left(-1\frac{3}{4}, -1\frac{1}{3}\right)$

19) Endpoint:  $\left(-1, -2\frac{7}{8}\right)$ , midpoint:  $\left(4\frac{1}{2}, 8\right)$

20) Endpoint:  $\left(-2\frac{3}{8}, 1\right)$ , midpoint:  $\left(-1, \frac{2}{3}\right)$

21) Endpoint:  $\left(2\frac{7}{8}, 2\frac{1}{4}\right)$ , midpoint:  $\left(0, -\frac{1}{2}\right)$

22) Endpoint:  $\left(-\frac{1}{8}, 4\frac{1}{6}\right)$ , midpoint:  $\left(-3\frac{1}{3}, 2\frac{1}{4}\right)$

23) Endpoint:  $\left(6\frac{3}{7}, 3\frac{2}{7}\right)$ , midpoint:  $\left(-\frac{1}{4}, 4\frac{1}{5}\right)$

24) Endpoint:  $\left(2\frac{6}{7}, -4\right)$ , midpoint:  $\left(1, -2\frac{3}{8}\right)$





## Answers to Assignment (ID: 3)

1)  $\left(3\frac{1}{2}, -3\frac{14}{15}\right)$

2)  $\left(4\frac{5}{8}, 2\frac{11}{24}\right)$

3)  $\left(6\frac{1}{8}, -3\frac{2}{3}\right)$

4)  $\left(-3\frac{5}{7}, -7\frac{1}{3}\right)$

5)  $\left(3\frac{5}{6}, -10\frac{1}{3}\right)$

6)  $\left(-5\frac{11}{24}, 2\frac{5}{12}\right)$

7)  $\left(-2\frac{17}{28}, 8\frac{11}{56}\right)$

8)  $\left(5\frac{14}{15}, 3\frac{1}{2}\right)$

9)  $\left(10\frac{1}{5}, 1\frac{1}{4}\right)$

10)  $\left(6, 6\frac{1}{2}\right)$

11)  $\left(10\frac{1}{6}, -5\frac{1}{2}\right)$

12)  $\left(9\frac{1}{7}, 3\frac{5}{12}\right)$

13)  $\left(-\frac{1}{6}, 4\frac{1}{4}\right)$

14)  $\left(-2\frac{8}{35}, 2\frac{1}{6}\right)$

15)  $\left(-\frac{1}{3}, -2\frac{4}{5}\right)$

16)  $\left(-\frac{1}{2}, 6\frac{2}{3}\right)$

17)  $\left(9\frac{5}{7}, 5\frac{5}{6}\right)$

18)  $\left(-3\frac{1}{2}, -\frac{11}{12}\right)$

19)  $\left(10, 18\frac{7}{8}\right)$

20)  $\left(\frac{3}{8}, \frac{1}{3}\right)$

21)  $\left(-2\frac{7}{8}, -3\frac{1}{4}\right)$

22)  $\left(-6\frac{13}{24}, \frac{1}{3}\right)$

23)  $\left(-6\frac{13}{14}, 5\frac{4}{35}\right)$

24)  $\left(-\frac{6}{7}, -\frac{3}{4}\right)$



## Assignment

**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

1) Endpoint:  $\left(4\frac{1}{6}, -\frac{1}{2}\right)$ , midpoint:  $\left(-3\frac{1}{3}, -\frac{4}{3}\right)$

2) Endpoint:  $\left(1\frac{3}{7}, -1\frac{1}{8}\right)$ , midpoint:  $\left(-3\frac{1}{2}, 2\frac{1}{3}\right)$

3) Endpoint:  $\left(\frac{1}{6}, \frac{7}{8}\right)$ , midpoint:  $\left(-2\frac{3}{4}, \frac{10}{7}\right)$

4) Endpoint:  $\left(-3\frac{1}{5}, 1\right)$ , midpoint:  $\left(3\frac{1}{2}, 4\frac{1}{3}\right)$

5) Endpoint:  $\left(4\frac{4}{5}, -1\frac{5}{7}\right)$ , midpoint:  $(0, 0)$

6) Endpoint:  $\left(1\frac{1}{4}, 2\right)$ , midpoint:  $\left(\frac{5}{8}, \frac{7}{5}\right)$

7) Endpoint:  $\left(3\frac{3}{5}, 3\frac{1}{6}\right)$ , midpoint:  $\left(\frac{7}{4}, 1\frac{1}{6}\right)$

8) Endpoint:  $\left(\frac{1}{4}, 1\right)$ , midpoint:  $\left(\frac{3}{4}, -1\frac{1}{3}\right)$

9) Endpoint:  $\left(-1\frac{1}{3}, \frac{4}{3}\right)$ , midpoint:  $\left(0, \frac{1}{5}\right)$

10) Endpoint:  $\left(-6\frac{1}{3}, \frac{9}{5}\right)$ , midpoint:  $\left(-\frac{5}{3}, -3\frac{2}{5}\right)$

11) Endpoint:  $\left(-\frac{1}{2}, \frac{5}{3}\right)$ , midpoint:  $\left(-\frac{2}{3}, \frac{1}{2}\right)$

12) Endpoint:  $\left(-\frac{2}{3}, 1\frac{5}{6}\right)$ , midpoint:  $\left(-\frac{3}{2}, 2\frac{1}{2}\right)$

13) Endpoint:  $\left(4\frac{2}{3}, -1\frac{1}{3}\right)$ , midpoint:  $\left(8, \frac{3}{8}\right)$

14) Endpoint:  $\left(-\frac{3}{2}, -\frac{3}{8}\right)$ , midpoint:  $\left(-3\frac{3}{5}, -\frac{1}{3}\right)$

15) Endpoint:  $\left(1, 3\frac{1}{2}\right)$ , midpoint:  $\left(-3\frac{5}{6}, \frac{1}{2}\right)$

16) Endpoint:  $\left(\frac{15}{8}, 2\right)$ , midpoint:  $\left(-3\frac{1}{2}, -\frac{6}{5}\right)$



17) Endpoint:  $\left(\frac{1}{8}, -1\frac{3}{4}\right)$ , midpoint:  $\left(4\frac{1}{6}, -\frac{1}{4}\right)$

18) Endpoint:  $(-2, 2)$ , midpoint:  $\left(-3\frac{3}{8}, -1\right)$

19) Endpoint:  $\left(\frac{10}{7}, \frac{13}{8}\right)$ , midpoint:  $\left(-\frac{9}{7}, 4\right)$

20) Endpoint:  $\left(\frac{1}{3}, 2\frac{1}{5}\right)$ , midpoint:  $\left(-2, \frac{10}{7}\right)$

21) Endpoint:  $\left(5, -\frac{2}{3}\right)$ , midpoint:  $\left(-\frac{11}{7}, 4\frac{5}{8}\right)$

22) Endpoint:  $\left(-\frac{4}{3}, 7\right)$ , midpoint:  $\left(4\frac{2}{5}, \frac{9}{5}\right)$

23) Endpoint:  $\left(\frac{4}{5}, -1\frac{1}{2}\right)$ , midpoint:  $\left(0, 4\frac{7}{8}\right)$

24) Endpoint:  $\left(8, \frac{4}{5}\right)$ , midpoint:  $\left(-2\frac{3}{7}, \frac{1}{4}\right)$



## Answers to Assignment (ID: 4)

1)  $\left(-10\frac{5}{6}, -2\frac{1}{6}\right)$

2)  $\left(-8\frac{3}{7}, 5\frac{19}{24}\right)$

3)  $\left(-5\frac{2}{3}, 1\frac{55}{56}\right)$

4)  $\left(10\frac{1}{5}, 7\frac{2}{3}\right)$

5)  $\left(-4\frac{4}{5}, 1\frac{5}{7}\right)$

6)  $\left(0, \frac{4}{5}\right)$

7)  $\left(-\frac{1}{10}, -\frac{5}{6}\right)$

8)  $\left(1\frac{1}{4}, -3\frac{2}{3}\right)$

9)  $\left(1\frac{1}{3}, -\frac{14}{15}\right)$

10)  $\left(3, -8\frac{3}{5}\right)$

11)  $\left(-\frac{5}{6}, -\frac{2}{3}\right)$

12)  $\left(-2\frac{1}{3}, 3\frac{1}{6}\right)$

13)  $\left(11\frac{1}{3}, 2\frac{1}{12}\right)$

14)  $\left(-5\frac{7}{10}, -\frac{7}{24}\right)$

15)  $\left(-8\frac{2}{3}, -2\frac{1}{2}\right)$

16)  $\left(-8\frac{7}{8}, -4\frac{2}{5}\right)$

17)  $\left(8\frac{5}{24}, 1\frac{1}{4}\right)$

18)  $\left(-4\frac{3}{4}, -4\right)$

19)  $\left(-4, 6\frac{3}{8}\right)$

20)  $\left(-4\frac{1}{3}, \frac{23}{35}\right)$

21)  $\left(-8\frac{1}{7}, 9\frac{11}{12}\right)$

22)  $\left(10\frac{2}{15}, -3\frac{2}{5}\right)$

23)  $\left(-\frac{4}{5}, 11\frac{1}{4}\right)$

24)  $\left(-12\frac{6}{7}, -\frac{3}{10}\right)$



## Assignment

**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

1) Endpoint:  $\left(-1\frac{1}{4}, -\frac{1}{6}\right)$ , midpoint:  $\left(\frac{8}{5}, 2\right)$

2) Endpoint:  $\left(2, -2\frac{1}{8}\right)$ , midpoint:  $\left(-3\frac{2}{7}, \frac{5}{6}\right)$

3) Endpoint:  $\left(2, -\frac{4}{3}\right)$ , midpoint:  $\left(1\frac{5}{8}, \frac{1}{4}\right)$

4) Endpoint:  $\left(2\frac{1}{2}, -\frac{3}{2}\right)$ , midpoint:  $\left(-1, \frac{4}{3}\right)$

5) Endpoint:  $\left(-3\frac{2}{3}, -2\right)$ , midpoint:  $\left(-1\frac{1}{2}, -\frac{1}{3}\right)$

6) Endpoint:  $\left(-\frac{7}{5}, -2\frac{6}{7}\right)$ , midpoint:  $\left(-3\frac{1}{6}, -\frac{11}{7}\right)$

7) Endpoint:  $\left(4\frac{1}{3}, 2\frac{1}{2}\right)$ , midpoint:  $\left(4\frac{1}{2}, 4\right)$

8) Endpoint:  $\left(\frac{5}{8}, \frac{1}{3}\right)$ , midpoint:  $\left(\frac{8}{7}, \frac{2}{7}\right)$

9) Endpoint:  $\left(-3\frac{1}{2}, 2\frac{2}{3}\right)$ , midpoint:  $\left(-\frac{1}{4}, 1\right)$

10) Endpoint:  $\left(2\frac{1}{2}, \frac{2}{7}\right)$ , midpoint:  $\left(\frac{7}{8}, 2\right)$

11) Endpoint:  $\left(-2\frac{5}{8}, -\frac{1}{3}\right)$ , midpoint:  $\left(\frac{1}{6}, -1\frac{4}{5}\right)$

12) Endpoint:  $\left(3\frac{2}{7}, -1\frac{1}{2}\right)$ , midpoint:  $\left(-1\frac{3}{8}, -1\frac{3}{4}\right)$

13) Endpoint:  $\left(2\frac{5}{6}, -3\frac{1}{2}\right)$ , midpoint:  $\left(2\frac{1}{2}, -\frac{2}{3}\right)$

14) Endpoint:  $\left(1\frac{1}{6}, \frac{1}{5}\right)$ , midpoint:  $(-2, -2)$

15) Endpoint:  $\left(-2\frac{3}{8}, \frac{2}{7}\right)$ , midpoint:  $\left(\frac{1}{3}, -2\right)$

16) Endpoint:  $\left(-2\frac{1}{6}, -\frac{15}{8}\right)$ , midpoint:  $\left(3\frac{2}{3}, 2\frac{5}{8}\right)$



17) Endpoint:  $\left(\frac{1}{6}, \frac{3}{4}\right)$ , midpoint:  $\left(\frac{3}{5}, 1\frac{1}{3}\right)$

18) Endpoint:  $\left(\frac{9}{5}, 1\frac{7}{8}\right)$ , midpoint:  $\left(5, -\frac{13}{8}\right)$

19) Endpoint:  $\left(-3\frac{3}{5}, -\frac{13}{7}\right)$ , midpoint:  $\left(-\frac{10}{7}, -1\right)$

20) Endpoint:  $\left(\frac{3}{2}, 0\right)$ , midpoint:  $\left(1, 1\frac{3}{4}\right)$

21) Endpoint:  $\left(\frac{3}{2}, 1\frac{2}{5}\right)$ , midpoint:  $\left(\frac{1}{2}, -\frac{5}{3}\right)$

22) Endpoint:  $\left(-\frac{3}{4}, \frac{9}{7}\right)$ , midpoint:  $\left(-\frac{7}{5}, -8\right)$

23) Endpoint:  $\left(-1, \frac{1}{2}\right)$ , midpoint:  $\left(2\frac{3}{4}, 2\frac{3}{4}\right)$

24) Endpoint:  $\left(\frac{2}{3}, 4\frac{1}{8}\right)$ , midpoint:  $\left(-\frac{1}{2}, \frac{4}{5}\right)$



## Answers to Assignment (ID: 5)

1)  $\left(4\frac{9}{20}, 4\frac{1}{6}\right)$

2)  $\left(-8\frac{4}{7}, 3\frac{19}{24}\right)$

3)  $\left(1\frac{1}{4}, 1\frac{5}{6}\right)$

4)  $\left(-4\frac{1}{2}, 4\frac{1}{6}\right)$

5)  $\left(\frac{2}{3}, 1\frac{1}{3}\right)$

6)  $\left(-4\frac{14}{15}, -\frac{2}{7}\right)$

7)  $\left(4\frac{2}{3}, 5\frac{1}{2}\right)$

8)  $\left(1\frac{37}{56}, \frac{5}{21}\right)$

9)  $\left(3, -\frac{2}{3}\right)$

10)  $\left(-\frac{3}{4}, 3\frac{5}{7}\right)$

11)  $\left(2\frac{23}{24}, -3\frac{4}{15}\right)$

12)  $\left(-6\frac{1}{28}, -2\right)$

13)  $\left(2\frac{1}{6}, 2\frac{1}{6}\right)$

14)  $\left(-5\frac{1}{6}, -4\frac{1}{5}\right)$

15)  $\left(3\frac{1}{24}, -4\frac{2}{7}\right)$

16)  $\left(9\frac{1}{2}, 7\frac{1}{8}\right)$

17)  $\left(1\frac{1}{30}, 1\frac{11}{12}\right)$

18)  $\left(8\frac{1}{5}, -5\frac{1}{8}\right)$

19)  $\left(\frac{26}{35}, -\frac{1}{7}\right)$

20)  $\left(\frac{1}{2}, 3\frac{1}{2}\right)$

21)  $\left(-\frac{1}{2}, -4\frac{11}{15}\right)$

22)  $\left(-2\frac{1}{20}, -17\frac{2}{7}\right)$

23)  $\left(6\frac{1}{2}, 5\right)$

24)  $\left(-1\frac{2}{3}, -2\frac{21}{40}\right)$



## Assignment

**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

1) Endpoint:  $(-1, -1)$ , midpoint:  $(1\frac{5}{8}, 0)$

2) Endpoint:  $(-\frac{3}{2}, 4\frac{5}{7})$ , midpoint:  $(1, 0)$

3) Endpoint:  $(2, 7)$ , midpoint:  $(2\frac{4}{5}, 0)$

4) Endpoint:  $(-2, -\frac{1}{5})$ , midpoint:  $(-\frac{1}{2}, -\frac{3}{2})$

5) Endpoint:  $(-7, -5)$ , midpoint:  $(2, \frac{11}{6})$

6) Endpoint:  $(\frac{5}{8}, -4\frac{1}{2})$ , midpoint:  $(-\frac{7}{5}, 3\frac{1}{2})$

7) Endpoint:  $(\frac{11}{8}, -\frac{9}{7})$ , midpoint:  $(2\frac{1}{5}, 2\frac{4}{5})$

8) Endpoint:  $(-\frac{9}{7}, 2\frac{1}{2})$ , midpoint:  $(2\frac{1}{4}, 2)$

9) Endpoint:  $(1\frac{6}{7}, 4\frac{1}{4})$ , midpoint:  $(6\frac{1}{6}, 2)$

10) Endpoint:  $(1\frac{5}{6}, -2)$ , midpoint:  $(\frac{3}{7}, 3\frac{5}{8})$

11) Endpoint:  $(\frac{13}{7}, 4\frac{4}{5})$ , midpoint:  $(-\frac{12}{7}, \frac{1}{6})$

12) Endpoint:  $(-2\frac{5}{6}, -\frac{3}{2})$ , midpoint:  $(4\frac{2}{5}, -1)$

13) Endpoint:  $(5, \frac{1}{5})$ , midpoint:  $(-3\frac{1}{3}, 1\frac{1}{6})$

14) Endpoint:  $(2\frac{4}{5}, -1\frac{1}{8})$ , midpoint:  $(\frac{7}{6}, -3\frac{4}{5})$

15) Endpoint:  $(-3\frac{2}{5}, -\frac{4}{5})$ , midpoint:  $(\frac{2}{3}, -1\frac{5}{6})$

16) Endpoint:  $(1\frac{1}{4}, 2\frac{1}{6})$ , midpoint:  $(-\frac{13}{7}, -\frac{3}{4})$





17) Endpoint:  $\left(\frac{1}{4}, 2\frac{3}{5}\right)$ , midpoint:  $\left(2\frac{1}{6}, 4\frac{1}{2}\right)$

18) Endpoint:  $\left(-3\frac{2}{3}, \frac{15}{8}\right)$ , midpoint:  $\left(-\frac{12}{7}, -1\frac{1}{8}\right)$

19) Endpoint:  $\left(-2\frac{2}{3}, -2\frac{1}{2}\right)$ , midpoint:  $\left(\frac{5}{7}, 2\frac{1}{2}\right)$

20) Endpoint:  $\left(1\frac{1}{2}, -6\right)$ , midpoint:  $\left(3\frac{5}{6}, 4\frac{1}{2}\right)$

21) Endpoint:  $\left(1\frac{1}{2}, 2\frac{1}{6}\right)$ , midpoint:  $\left(-6, \frac{5}{8}\right)$

22) Endpoint:  $\left(3\frac{2}{3}, 2\frac{3}{4}\right)$ , midpoint:  $\left(\frac{2}{5}, \frac{11}{6}\right)$

23) Endpoint:  $\left(-2\frac{1}{2}, -2\frac{4}{7}\right)$ , midpoint:  $\left(\frac{7}{6}, 3\frac{1}{5}\right)$

24) Endpoint:  $\left(-1\frac{5}{8}, -\frac{9}{5}\right)$ , midpoint:  $\left(4\frac{6}{7}, 2\frac{1}{2}\right)$



## Answers to Assignment (ID: 6)

1)  $\left(4\frac{1}{4}, 1\right)$

2)  $\left(3\frac{1}{2}, -4\frac{5}{7}\right)$

3)  $\left(3\frac{3}{5}, -7\right)$

4)  $\left(1, -2\frac{4}{5}\right)$

5)  $\left(11, 8\frac{2}{3}\right)$

6)  $\left(-3\frac{17}{40}, 11\frac{1}{2}\right)$

7)  $\left(3\frac{1}{40}, 6\frac{31}{35}\right)$

8)  $\left(5\frac{11}{14}, 1\frac{1}{2}\right)$

9)  $\left(10\frac{10}{21}, -\frac{1}{4}\right)$

10)  $\left(-\frac{41}{42}, 9\frac{1}{4}\right)$

11)  $\left(-5\frac{2}{7}, -4\frac{7}{15}\right)$

12)  $\left(11\frac{19}{30}, -\frac{1}{2}\right)$

13)  $\left(-11\frac{2}{3}, 2\frac{2}{15}\right)$

14)  $\left(-\frac{7}{15}, -6\frac{19}{40}\right)$

15)  $\left(4\frac{11}{15}, -2\frac{13}{15}\right)$

16)  $\left(-4\frac{27}{28}, -3\frac{2}{3}\right)$

17)  $\left(4\frac{1}{12}, 6\frac{2}{5}\right)$

18)  $\left(\frac{5}{21}, -4\frac{1}{8}\right)$

19)  $\left(4\frac{2}{21}, 7\frac{1}{2}\right)$

20)  $\left(6\frac{1}{6}, 15\right)$

21)  $\left(-13\frac{1}{2}, -\frac{11}{12}\right)$

22)  $\left(-2\frac{13}{15}, \frac{11}{12}\right)$

23)  $\left(4\frac{5}{6}, 8\frac{34}{35}\right)$

24)  $\left(11\frac{19}{56}, 6\frac{4}{5}\right)$



## Assignment

**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

1) Endpoint:  $\left(-\frac{12}{7}, 3\frac{3}{5}\right)$ , midpoint:  $(-2, -1)$

2) Endpoint:  $\left(\frac{8}{7}, -\frac{5}{7}\right)$ , midpoint:  $\left(3\frac{5}{6}, 2\right)$

3) Endpoint:  $\left(\frac{1}{7}, -2\frac{1}{5}\right)$ , midpoint:  $\left(\frac{2}{3}, \frac{1}{2}\right)$

4) Endpoint:  $\left(\frac{13}{7}, -1\right)$ , midpoint:  $\left(\frac{6}{7}, \frac{2}{5}\right)$

5) Endpoint:  $(0, -2)$ , midpoint:  $\left(2\frac{3}{4}, 0\right)$

6) Endpoint:  $\left(\frac{5}{6}, 2\frac{1}{2}\right)$ , midpoint:  $\left(-1\frac{2}{5}, -2\frac{1}{2}\right)$

7) Endpoint:  $\left(\frac{9}{5}, -2\frac{2}{7}\right)$ , midpoint:  $\left(\frac{7}{5}, 4\frac{2}{3}\right)$

8) Endpoint:  $\left(-2, -\frac{1}{3}\right)$ , midpoint:  $\left(-3\frac{2}{3}, \frac{4}{3}\right)$

9) Endpoint:  $\left(-\frac{2}{5}, 2\frac{1}{5}\right)$ , midpoint:  $\left(-2\frac{1}{3}, 2\frac{3}{8}\right)$

10) Endpoint:  $\left(\frac{8}{5}, -\frac{1}{2}\right)$ , midpoint:  $\left(4\frac{2}{7}, -3\frac{2}{3}\right)$

11) Endpoint:  $\left(\frac{1}{2}, \frac{6}{7}\right)$ , midpoint:  $\left(\frac{1}{6}, -\frac{1}{5}\right)$

12) Endpoint:  $\left(0, -1\frac{3}{4}\right)$ , midpoint:  $\left(-\frac{4}{3}, 4\frac{3}{7}\right)$

13) Endpoint:  $\left(-\frac{2}{3}, 0\right)$ , midpoint:  $\left(-1\frac{1}{3}, -\frac{1}{2}\right)$

14) Endpoint:  $(-1, -2)$ , midpoint:  $\left(-2\frac{1}{4}, 3\frac{1}{3}\right)$

15) Endpoint:  $\left(\frac{5}{3}, -2\frac{1}{2}\right)$ , midpoint:  $\left(-\frac{3}{2}, -3\frac{4}{5}\right)$

16) Endpoint:  $\left(-2, -2\frac{5}{8}\right)$ , midpoint:  $\left(\frac{3}{4}, 1\frac{3}{4}\right)$



17) Endpoint:  $\left(-1\frac{1}{2}, 2\right)$ , midpoint:  $\left(4\frac{1}{2}, -2\frac{3}{5}\right)$

18) Endpoint:  $\left(4\frac{1}{8}, -\frac{1}{4}\right)$ , midpoint:  $\left(-1\frac{2}{5}, 3\frac{4}{7}\right)$

19) Endpoint:  $\left(-1\frac{3}{8}, -\frac{5}{4}\right)$ , midpoint:  $\left(3\frac{2}{3}, 1\frac{1}{2}\right)$

20) Endpoint:  $\left(-3\frac{5}{8}, 2\right)$ , midpoint:  $\left(2\frac{3}{7}, -\frac{2}{3}\right)$

21) Endpoint:  $\left(4\frac{3}{8}, -\frac{6}{7}\right)$ , midpoint:  $\left(-1\frac{1}{5}, \frac{1}{2}\right)$

22) Endpoint:  $\left(0, -3\frac{5}{6}\right)$ , midpoint:  $\left(-\frac{1}{2}, -\frac{6}{5}\right)$

23) Endpoint:  $\left(\frac{1}{6}, -2\frac{1}{8}\right)$ , midpoint:  $\left(1\frac{4}{5}, 1\frac{3}{4}\right)$

24) Endpoint:  $\left(2, \frac{1}{4}\right)$ , midpoint:  $\left(0, -\frac{7}{4}\right)$



## Answers to Assignment (ID: 7)

1)  $\left(-2\frac{2}{7}, -5\frac{3}{5}\right)$

2)  $\left(6\frac{11}{21}, 4\frac{5}{7}\right)$

3)  $\left(1\frac{4}{21}, 3\frac{1}{5}\right)$

4)  $\left(-\frac{1}{7}, 1\frac{4}{5}\right)$

5)  $\left(5\frac{1}{2}, 2\right)$

6)  $\left(-3\frac{19}{30}, -7\frac{1}{2}\right)$

7)  $\left(1, 11\frac{13}{21}\right)$

8)  $\left(-5\frac{1}{3}, 3\right)$

9)  $\left(-4\frac{4}{15}, 2\frac{11}{20}\right)$

10)  $\left(6\frac{34}{35}, -6\frac{5}{6}\right)$

11)  $\left(-\frac{1}{6}, -1\frac{9}{35}\right)$

12)  $\left(-2\frac{2}{3}, 10\frac{17}{28}\right)$

13)  $(-2, -1)$

14)  $\left(-3\frac{1}{2}, 8\frac{2}{3}\right)$

15)  $\left(-4\frac{2}{3}, -5\frac{1}{10}\right)$

16)  $\left(3\frac{1}{2}, 6\frac{1}{8}\right)$

17)  $\left(10\frac{1}{2}, -7\frac{1}{5}\right)$

18)  $\left(-6\frac{37}{40}, 7\frac{11}{28}\right)$

19)  $\left(8\frac{17}{24}, 4\frac{1}{4}\right)$

20)  $\left(8\frac{27}{56}, -3\frac{1}{3}\right)$

21)  $\left(-6\frac{31}{40}, 1\frac{6}{7}\right)$

22)  $\left(-1, 1\frac{13}{30}\right)$

23)  $\left(3\frac{13}{30}, 5\frac{5}{8}\right)$

24)  $\left(-2, -3\frac{3}{4}\right)$



## Assignment

**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

1) Endpoint:  $\left(-3\frac{4}{5}, \frac{2}{3}\right)$ , midpoint:  $\left(-2, -\frac{2}{3}\right)$

2) Endpoint:  $\left(-1\frac{1}{5}, \frac{1}{6}\right)$ , midpoint:  $\left(1\frac{1}{3}, -\frac{5}{4}\right)$

3) Endpoint:  $\left(1\frac{1}{6}, -\frac{10}{7}\right)$ , midpoint:  $\left(2\frac{2}{5}, 1\frac{1}{4}\right)$

4) Endpoint:  $\left(3\frac{3}{5}, -\frac{10}{7}\right)$ , midpoint:  $\left(2\frac{5}{6}, 4\frac{1}{2}\right)$

5) Endpoint:  $\left(3\frac{1}{4}, -1\frac{1}{2}\right)$ , midpoint:  $\left(-1\frac{2}{5}, 4\frac{2}{3}\right)$

6) Endpoint:  $\left(2\frac{3}{4}, 3\frac{5}{6}\right)$ , midpoint:  $\left(-2\frac{2}{3}, 4\frac{5}{6}\right)$

7) Endpoint:  $\left(-1\frac{1}{3}, -3\frac{1}{2}\right)$ , midpoint:  $\left(-2\frac{1}{4}, 1\frac{1}{3}\right)$

8) Endpoint:  $\left(-\frac{5}{3}, \frac{2}{5}\right)$ , midpoint:  $\left(-1, -\frac{11}{7}\right)$

9) Endpoint:  $\left(-\frac{3}{2}, -2\right)$ , midpoint:  $\left(-\frac{7}{6}, 3\frac{3}{4}\right)$

10) Endpoint:  $(2, -2)$ , midpoint:  $\left(-\frac{8}{5}, \frac{4}{5}\right)$

11) Endpoint:  $\left(\frac{7}{4}, \frac{10}{7}\right)$ , midpoint:  $\left(3\frac{1}{8}, 1\frac{1}{6}\right)$

12) Endpoint:  $(-2, 4)$ , midpoint:  $(-1, 2)$

13) Endpoint:  $\left(\frac{1}{2}, -3\frac{1}{2}\right)$ , midpoint:  $\left(\frac{1}{2}, \frac{5}{6}\right)$

14) Endpoint:  $\left(\frac{5}{4}, 4\frac{2}{5}\right)$ , midpoint:  $\left(-2\frac{5}{6}, -\frac{4}{7}\right)$

15) Endpoint:  $\left(-\frac{1}{2}, \frac{1}{4}\right)$ , midpoint:  $\left(\frac{4}{5}, -2\frac{7}{8}\right)$

16) Endpoint:  $\left(-\frac{11}{7}, 4\frac{6}{7}\right)$ , midpoint:  $\left(2\frac{5}{8}, -3\frac{4}{7}\right)$



17) Endpoint:  $\left(\frac{13}{7}, \frac{3}{4}\right)$ , midpoint:  $\left(-\frac{5}{4}, 2\right)$

18) Endpoint:  $\left(\frac{11}{6}, 2\frac{1}{2}\right)$ , midpoint:  $\left(-3\frac{1}{4}, -1\right)$

19) Endpoint:  $\left(0, 4\frac{1}{8}\right)$ , midpoint:  $\left(0, \frac{4}{3}\right)$

20) Endpoint:  $\left(\frac{7}{6}, \frac{1}{6}\right)$ , midpoint:  $\left(\frac{4}{5}, \frac{1}{2}\right)$

21) Endpoint:  $\left(\frac{1}{3}, 4\frac{1}{4}\right)$ , midpoint:  $\left(\frac{1}{3}, -\frac{1}{3}\right)$

22) Endpoint:  $\left(-\frac{2}{5}, -1\right)$ , midpoint:  $\left(-1\frac{2}{3}, -3\frac{1}{3}\right)$

23) Endpoint:  $\left(3\frac{1}{4}, 2\right)$ , midpoint:  $\left(-2\frac{5}{7}, 2\frac{1}{2}\right)$

24) Endpoint:  $\left(3\frac{1}{4}, \frac{5}{3}\right)$ , midpoint:  $\left(-2, \frac{5}{3}\right)$



## Answers to Assignment (ID: 8)

1)  $\left(-\frac{1}{5}, -2\right)$

2)  $\left(3\frac{13}{15}, -2\frac{2}{3}\right)$

3)  $\left(3\frac{19}{30}, 3\frac{13}{14}\right)$

4)  $\left(2\frac{1}{15}, 10\frac{3}{7}\right)$

5)  $\left(-6\frac{1}{20}, 10\frac{5}{6}\right)$

6)  $\left(-8\frac{1}{12}, 5\frac{5}{6}\right)$

7)  $\left(-3\frac{1}{6}, 6\frac{1}{6}\right)$

8)  $\left(-\frac{1}{3}, -3\frac{19}{35}\right)$

9)  $\left(-\frac{5}{6}, 9\frac{1}{2}\right)$

10)  $\left(-5\frac{1}{5}, 3\frac{3}{5}\right)$

11)  $\left(4\frac{1}{2}, \frac{19}{21}\right)$

12)  $(0, 0)$

13)  $\left(\frac{1}{2}, 5\frac{1}{6}\right)$

14)  $\left(-6\frac{11}{12}, -5\frac{19}{35}\right)$

15)  $\left(2\frac{1}{10}, -6\right)$

16)  $\left(6\frac{23}{28}, -12\right)$

17)  $\left(-4\frac{5}{14}, 3\frac{1}{4}\right)$

18)  $\left(-8\frac{1}{3}, -4\frac{1}{2}\right)$

19)  $\left(0, -1\frac{11}{24}\right)$

20)  $\left(\frac{13}{30}, \frac{5}{6}\right)$

21)  $\left(\frac{1}{3}, -4\frac{11}{12}\right)$

22)  $\left(-2\frac{14}{15}, -5\frac{2}{3}\right)$

23)  $\left(-8\frac{19}{28}, 3\right)$

24)  $\left(-7\frac{1}{4}, 1\frac{2}{3}\right)$





## Assignment

**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

1) Endpoint:  $\left(-2\frac{1}{3}, -2\frac{1}{6}\right)$ , midpoint:  $\left(2, -3\frac{2}{3}\right)$

2) Endpoint:  $\left(4\frac{3}{4}, -2\frac{3}{8}\right)$ , midpoint:  $\left(\frac{2}{3}, 1\frac{3}{4}\right)$

3) Endpoint:  $\left(-3\frac{2}{3}, \frac{5}{3}\right)$ , midpoint:  $\left(0, -\frac{5}{4}\right)$

4) Endpoint:  $\left(-1\frac{1}{4}, \frac{5}{7}\right)$ , midpoint:  $\left(\frac{2}{3}, \frac{3}{4}\right)$

5) Endpoint:  $\left(1\frac{1}{2}, \frac{1}{2}\right)$ , midpoint:  $\left(-\frac{5}{3}, \frac{3}{8}\right)$

6) Endpoint:  $\left(\frac{1}{2}, -\frac{1}{4}\right)$ , midpoint:  $\left(4\frac{1}{8}, 1\frac{5}{8}\right)$

7) Endpoint:  $\left(4\frac{1}{2}, -1\frac{2}{5}\right)$ , midpoint:  $\left(\frac{5}{3}, -\frac{11}{6}\right)$

8) Endpoint:  $\left(\frac{5}{8}, -1\right)$ , midpoint:  $\left(-1, \frac{4}{5}\right)$

9) Endpoint:  $(5, 6)$ , midpoint:  $\left(1\frac{1}{3}, -1\frac{5}{8}\right)$

10) Endpoint:  $\left(4\frac{2}{7}, -\frac{1}{4}\right)$ , midpoint:  $\left(-1\frac{2}{3}, -3\frac{1}{2}\right)$

11) Endpoint:  $\left(-3\frac{6}{7}, 1\frac{1}{6}\right)$ , midpoint:  $\left(1\frac{1}{5}, \frac{3}{4}\right)$

12) Endpoint:  $\left(4\frac{5}{6}, 6\frac{3}{4}\right)$ , midpoint:  $\left(-1\frac{5}{6}, -\frac{1}{2}\right)$

13) Endpoint:  $\left(\frac{1}{6}, 1\frac{2}{5}\right)$ , midpoint:  $\left(-2, 4\frac{5}{6}\right)$

14) Endpoint:  $(-8, 1)$ , midpoint:  $\left(-3\frac{1}{2}, \frac{7}{4}\right)$

15) Endpoint:  $\left(1\frac{6}{7}, 2\frac{7}{8}\right)$ , midpoint:  $\left(-1, \frac{5}{6}\right)$

16) Endpoint:  $\left(-\frac{3}{4}, 1\frac{1}{2}\right)$ , midpoint:  $\left(-2\frac{1}{4}, -1\frac{5}{7}\right)$



17) Endpoint:  $\left(\frac{2}{5}, -2\frac{3}{4}\right)$ , midpoint:  $\left(3\frac{5}{7}, \frac{1}{3}\right)$

18) Endpoint:  $\left(-\frac{8}{5}, \frac{1}{7}\right)$ , midpoint:  $\left(1\frac{5}{7}, \frac{1}{3}\right)$

19) Endpoint:  $\left(-1, \frac{7}{6}\right)$ , midpoint:  $\left(\frac{1}{2}, -\frac{2}{3}\right)$

20) Endpoint:  $\left(-2, 1\frac{5}{8}\right)$ , midpoint:  $\left(\frac{1}{5}, \frac{2}{3}\right)$

21) Endpoint:  $\left(1, 1\frac{1}{4}\right)$ , midpoint:  $\left(-\frac{2}{5}, 1\frac{4}{7}\right)$

22) Endpoint:  $\left(-\frac{1}{3}, 2\frac{3}{4}\right)$ , midpoint:  $\left(\frac{12}{7}, 8\right)$

23) Endpoint:  $\left(2, -\frac{2}{3}\right)$ , midpoint:  $\left(4\frac{3}{7}, \frac{7}{8}\right)$

24) Endpoint:  $\left(-\frac{3}{2}, -1\frac{1}{2}\right)$ , midpoint:  $\left(2\frac{6}{7}, -1\frac{1}{4}\right)$



## Answers to Assignment (ID: 9)

1)  $\left(6\frac{1}{3}, -5\frac{1}{6}\right)$

2)  $\left(-3\frac{5}{12}, 5\frac{7}{8}\right)$

3)  $\left(3\frac{2}{3}, -4\frac{1}{6}\right)$

4)  $\left(2\frac{7}{12}, \frac{11}{14}\right)$

5)  $\left(-4\frac{5}{6}, \frac{1}{4}\right)$

6)  $\left(7\frac{3}{4}, 3\frac{1}{2}\right)$

7)  $\left(-1\frac{1}{6}, -2\frac{4}{15}\right)$

8)  $\left(-2\frac{5}{8}, 2\frac{3}{5}\right)$

9)  $\left(-2\frac{1}{3}, -9\frac{1}{4}\right)$

10)  $\left(-7\frac{13}{21}, -6\frac{3}{4}\right)$

11)  $\left(6\frac{9}{35}, \frac{1}{3}\right)$

12)  $\left(-8\frac{1}{2}, -7\frac{3}{4}\right)$

13)  $\left(-4\frac{1}{6}, 8\frac{4}{15}\right)$

14)  $\left(1, 2\frac{1}{2}\right)$

15)  $\left(-3\frac{6}{7}, -1\frac{5}{24}\right)$

16)  $\left(-3\frac{3}{4}, -4\frac{13}{14}\right)$

17)  $\left(7\frac{1}{35}, 3\frac{5}{12}\right)$

18)  $\left(5\frac{1}{35}, \frac{11}{21}\right)$

19)  $\left(2, -2\frac{1}{2}\right)$

20)  $\left(2\frac{2}{5}, -\frac{7}{24}\right)$

21)  $\left(-1\frac{4}{5}, 1\frac{25}{28}\right)$

22)  $\left(3\frac{16}{21}, 13\frac{1}{4}\right)$

23)  $\left(6\frac{6}{7}, 2\frac{5}{12}\right)$

24)  $\left(7\frac{3}{14}, -1\right)$



## Assignment

**Given the midpoint and one endpoint of a line segment, find the other endpoint.**

1) Endpoint:  $(0, -6)$ , midpoint:  $\left(\frac{1}{3}, -1\frac{7}{8}\right)$

2) Endpoint:  $\left(1, -3\frac{1}{4}\right)$ , midpoint:  $\left(-\frac{3}{5}, -2\frac{3}{4}\right)$

3) Endpoint:  $\left(\frac{7}{4}, \frac{2}{3}\right)$ , midpoint:  $\left(-3\frac{2}{3}, -\frac{3}{2}\right)$

4) Endpoint:  $\left(1, \frac{7}{6}\right)$ , midpoint:  $\left(-7, -\frac{4}{3}\right)$

5) Endpoint:  $\left(-\frac{2}{7}, -3\frac{3}{8}\right)$ , midpoint:  $(2, 0)$

6) Endpoint:  $\left(2\frac{1}{6}, \frac{1}{6}\right)$ , midpoint:  $\left(3\frac{3}{8}, \frac{1}{2}\right)$

7) Endpoint:  $\left(3\frac{4}{7}, \frac{3}{2}\right)$ , midpoint:  $\left(\frac{4}{3}, \frac{3}{2}\right)$

8) Endpoint:  $\left(1\frac{1}{6}, 3\frac{5}{6}\right)$ , midpoint:  $\left(3\frac{1}{2}, \frac{1}{3}\right)$

9) Endpoint:  $\left(-3\frac{1}{6}, \frac{1}{2}\right)$ , midpoint:  $\left(-2\frac{1}{2}, -3\right)$

10) Endpoint:  $\left(-3\frac{1}{5}, 2\frac{3}{8}\right)$ , midpoint:  $\left(\frac{1}{2}, -\frac{7}{4}\right)$

11) Endpoint:  $\left(-1\frac{2}{5}, -2\frac{1}{2}\right)$ , midpoint:  $\left(-\frac{7}{5}, \frac{4}{5}\right)$

12) Endpoint:  $\left(-4\frac{4}{5}, 0\right)$ , midpoint:  $\left(3\frac{2}{3}, \frac{1}{3}\right)$

13) Endpoint:  $\left(\frac{3}{4}, -1\right)$ , midpoint:  $\left(-\frac{1}{2}, -\frac{5}{3}\right)$

14) Endpoint:  $\left(3\frac{4}{5}, \frac{1}{2}\right)$ , midpoint:  $\left(-3, 1\frac{5}{6}\right)$

15) Endpoint:  $\left(2\frac{3}{4}, \frac{3}{4}\right)$ , midpoint:  $\left(-1\frac{4}{5}, 2\frac{2}{3}\right)$

16) Endpoint:  $\left(1\frac{1}{2}, 3\frac{3}{4}\right)$ , midpoint:  $\left(-\frac{5}{3}, -2\frac{1}{2}\right)$



17) Endpoint:  $\left(-1\frac{2}{3}, 2\frac{1}{5}\right)$ , midpoint:  $\left(-\frac{4}{3}, 4\frac{1}{3}\right)$

18) Endpoint:  $\left(-2\frac{1}{2}, 3\frac{5}{8}\right)$ , midpoint:  $\left(-1, -\frac{5}{4}\right)$

19) Endpoint:  $\left(2, -1\frac{7}{8}\right)$ , midpoint:  $\left(-3\frac{3}{4}, 3\frac{1}{2}\right)$

20) Endpoint:  $\left(-5\frac{1}{2}, -1\frac{4}{7}\right)$ , midpoint:  $\left(-2, \frac{1}{4}\right)$

21) Endpoint:  $\left(\frac{1}{4}, -\frac{11}{7}\right)$ , midpoint:  $\left(-2, \frac{9}{7}\right)$

22) Endpoint:  $\left(\frac{5}{4}, \frac{1}{4}\right)$ , midpoint:  $\left(-1\frac{1}{3}, -3\frac{3}{4}\right)$

23) Endpoint:  $\left(-6, \frac{4}{5}\right)$ , midpoint:  $\left(\frac{9}{5}, \frac{3}{4}\right)$

24) Endpoint:  $\left(-\frac{5}{4}, \frac{1}{3}\right)$ , midpoint:  $\left(-\frac{1}{3}, -\frac{8}{5}\right)$



## Answers to Assignment (ID: 10)

1)  $\left(\frac{2}{3}, 2\frac{1}{4}\right)$

2)  $\left(-2\frac{1}{5}, -2\frac{1}{4}\right)$

3)  $\left(-9\frac{1}{12}, -3\frac{2}{3}\right)$

4)  $\left(-15, -3\frac{5}{6}\right)$

5)  $\left(4\frac{2}{7}, 3\frac{3}{8}\right)$

6)  $\left(4\frac{7}{12}, \frac{5}{6}\right)$

7)  $\left(-\frac{19}{21}, 1\frac{1}{2}\right)$

8)  $\left(5\frac{5}{6}, -3\frac{1}{6}\right)$

9)  $\left(-1\frac{5}{6}, -6\frac{1}{2}\right)$

10)  $\left(4\frac{1}{5}, -5\frac{7}{8}\right)$

11)  $\left(-1\frac{2}{5}, 4\frac{1}{10}\right)$

12)  $\left(12\frac{2}{15}, \frac{2}{3}\right)$

13)  $\left(-1\frac{3}{4}, -2\frac{1}{3}\right)$

14)  $\left(-9\frac{4}{5}, 3\frac{1}{6}\right)$

15)  $\left(-6\frac{7}{20}, 4\frac{7}{12}\right)$

16)  $\left(-4\frac{5}{6}, -8\frac{3}{4}\right)$

17)  $\left(-1, 6\frac{7}{15}\right)$

18)  $\left(\frac{1}{2}, -6\frac{1}{8}\right)$

19)  $\left(-9\frac{1}{2}, 8\frac{7}{8}\right)$

20)  $\left(1\frac{1}{2}, 2\frac{1}{14}\right)$

21)  $\left(-4\frac{1}{4}, 4\frac{1}{7}\right)$

22)  $\left(-3\frac{11}{12}, -7\frac{3}{4}\right)$

23)  $\left(9\frac{3}{5}, \frac{7}{10}\right)$

24)  $\left(\frac{7}{12}, -3\frac{8}{15}\right)$

