Algebra 2

Name_____

9.1 Worksheet

Date_____ Period_____

Find the distance between each pair of points. Round your answer to the nearest tenth, if necessary.

1) $(-1, -1)$, $(-5, 8)$

2) $(7, 3)$, $(-7, 0)$

3) $(3, 1)$, $(-2, -1)$

4) $(2, 6)$, $(2, -2)$

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

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

Find the midpoint of the line segment with the given endpoints.

7) $(7, -4)$, $(9, -9)$

8) $(1, 3)$, $(8, 10)$

9) $(8, -9)$, $(-7, 0)$

10) $(0, -3)$, $(-2, 4)$

11) $\left(\frac{3}{4}, -\frac{1}{2}\right)$, $\left(\frac{15}{8}, -\frac{9}{5}\right)$

12) $(1, -8)$, $(2, -1)$

Find the other endpoint of the line segment with the given endpoint and midpoint.

13) Endpoint: $(5, 9)$, midpoint: $(0, -7)$

14) Endpoint: $(-9, 1)$, midpoint: $(-2, -3)$

15) DeShawn left the hospital and traveled toward the lake at an average speed of 32 mph. Julia left some time later traveling in the same direction at an average speed of 80 mph. After traveling for two hours Julia caught up with DeShawn. Find the number of hours DeShawn traveled before Julia caught up.

16) Working alone, it takes Aliyah 15 hours to tar a roof. Heather can tar the same roof in 11 hours. How long would it take them if they worked together?

17) Elisa left the White House driving north three hours before Jenny. Jenny drove in the opposite direction going 0 mph slower then Elisa for three hours after which time they were 720 mi. apart. What was Elisa's speed?

18) Willie traveled to the town hall and back. The trip there took two hours and the trip back took five hours. What was Willie's average speed on the trip there if he averaged 20 km/h on the return trip?

19) Kali left school and traveled toward the mountains. Jaidee left two hours later traveling 30 mph faster in an effort to catch up to her. After three hours Jaidee finally caught up. Find Kali's average speed.

20) James can tar a roof in 9 hours. One day his friend Jacob helped him and it only took 4.95 hours. How long would it take Jacob to do it alone?

Answers to 9.1 Worksheet

1) 9.8

3) 5.4

5) 3.9

7) $(8, -6.5)$

9) $(0.5, -4.5)$

11) $(1.313, -1.15)$

13) $(-5, -23)$

15) 5 hours

17) 80 mph

19) 45 mph