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1. Given $\mathrm{N}(7,2)$ and $\mathrm{K}(1,6)$, how long is $\overline{N K}$ to the nearest hundredth.

2. Given $\mathrm{E}(7,10)$ and $\mathrm{X}(-5,-9)$, how long is $\overline{E X}$ to the nearest thousandth.

3. Given $\mathrm{D}(-2,-8)$ and $\mathrm{E}(6,1)$, how long is $\overline{D E}$ to the nearest tenth.

4. Given $\mathrm{T}(-4,4)$ and $\mathrm{W}(2,-10)$, how long is $\overline{T W}$ to the nearest tenth.

5. Given Circle E with center $(3,5)$, if a point on the circle is $\mathrm{M}(-8,-6)$, how long is the radius of the circle to the nearest hundredth.

6. Given Circle A with center $(-3,0)$, if a point on the circle is $\mathrm{I}(-7,-8)$, how long is the radius of the circle to the nearest hundredth.

7. Given Circle B with center $(1,10)$, if a point on the circle is $\mathrm{K}(6,-4)$, how long is the radius of the circle to the nearest tenth.

8. Given Circle N with center $(6,9)$, if a point on the circle is $\mathrm{V}(-1,-9)$, how long is the radius of the circle to the nearest tenth.

9. Given that the endpoints of a side of a regular nonagon are $\mathrm{V}(-7,4)$ and $\mathrm{S}(5,-4)$, what is the perimeter of the regular nonagon to the nearest hundredth.

10. Given that the endpoints of a side of a regular pentagon are $\mathrm{E}(-3,1)$ and $\mathrm{Y}(5,7)$, what is the perimeter of the regular pentagon to the nearest whole number.

11. Given that the endpoints of a side of a regular octagon are $\mathrm{Y}(10,-1)$ and $\mathrm{L}(5,7)$, what is the perimeter of the regular octagon to the nearest thousandth.

12. Given that the endpoints of a side of a regular octagon are $\mathrm{O}(0,0)$ and $\mathrm{D}(6,7)$, what is the perimeter of the regular octagon to the nearest tenth.

13. Given that the endpoints of a side of a regular hexagon are $\mathrm{F}(-1,-3)$ and $\mathrm{I}(-4,10)$, what is the perimeter of the regular hexagon to the nearest thousandth.

14. Given Circle K with center $(5,7)$, if a point on the circle is $\mathrm{A}(8,-10)$, how long is the radius of the circle to the nearest tenth.

15. Given Circle $S$ with center $(-1,6)$, if a point on the circle is $\mathrm{Z}(3,3)$, how long is the radius of the circle to the nearest whole number.

16. Given Circle $U$ with center $(-8,-6)$, if a point on the circle is $\mathrm{R}(4,3)$, how long is the radius of the circle to the nearest thousandth.

17. Given that the endpoints of a side of a regular pentagon are $\mathrm{V}(0,-8)$ and $\mathrm{L}(5,3)$, what is the perimeter of the regular pentagon to the nearest thousandth.

18. Given $\mathrm{K}(9,-1)$ and $\mathrm{S}(-6,-10)$, how long is $\overline{K S}$ to the nearest whole number.

19. Given that the endpoints of a side of a regular decagon are $\mathrm{G}(6,-7)$ and $\mathrm{H}(-2,-4)$, what is the perimeter of the regular decagon to the nearest hundredth.

20. Given the line segment $\mathrm{AN}, \mathrm{A}(-9,-8)$, and $\mathrm{N}(9,4)$, determine the coordinates of the point C that partitions $\overline{A N}$, such that AC to CN is in a ratio of 1 to 5 .
21. Given $\mathrm{Z}(10,-6)$ and $\mathrm{Y}(-10,8)$, how long is $\overline{Z Y}$ to the nearest tenth.

22. Given the line segment $\mathrm{CL}, \mathrm{C}(-10,-8)$, and $\mathrm{L}(6,-4)$, determine the coordinates of the point R that divides $\overline{C L}$, such that CR:RL is in a ratio of 3 to 1 .
23. Given the line segment $\mathrm{DF}, \mathrm{D}(-10,0)$, and $\mathrm{F}(8,9)$, determine the coordinates of the point H that partitions $\overline{D F}$, such that $\mathrm{DH}: \mathrm{HF}$ is in a ratio of $2: 1$.
24. Given the directed line segment UP, $\mathrm{U}(-1,-7)$, and $\mathrm{P}(6,7)$, determine the coordinates of the point L that partitions $\overline{U P}$ into ratio of 6:1.
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25. $\mathrm{NK}=7.21$
26. $\mathrm{EX}=22.472$
27. $\mathrm{DE}=12$
28. $\mathrm{TW}=15.2$

5 . The radius is 15.56 .
6. The radius is 8.94 .
7. The radius is 14.9 .
8. The radius is 19.3 .
9. 129.8
10. 50
11. 75.472
12. 73.8
13. 80.05
14. The radius is 17.3 .
15. The radius is 5 .
16. The radius is 15 .
17. 60.415
18. $\mathrm{KS}=17$
19. 85.44
20. $\mathrm{ZY}=24.4$
21. $C=(-6,-6)$
22. $R=(2,-5)$
23. $H=(2,6)$
24. $L=(5,5)$

