

Answer Key

Lesson 5.4

Practice Level B

1. 8
2. 16
3. 5
4. 15
5. 12
6. 6
7. **a.** $M(2, 4); P(2, 1)$ **b.** $N(0, 1); KP = 4$ and $KN = 6$ therefore $KP = \frac{2}{3}KN$. **8.** $(-3, -1)$
9. $(5, -2)$
10. yes; yes; yes
11. no; no; no
12. no; yes; no
13. 12; 78°
14. 6.5; 15
15. $\frac{1}{3}$
16. $\frac{1}{2}$
17. $\frac{2}{3}$
18. 7
19. 5
20. 3
21. sometimes
22. sometimes
23. always
24. sometimes
25. 36 in.; By Theorem 5.8, the distance from the vertex to the centroid is $\frac{2}{3}$ times the length of the median (\overline{AB}) .
26. 8 mm; yes