Pg 154-155 #21-33 (odd) and
Pg 156 #1-5 all and #7, 9, 10

21. 4

23. $-\dfrac{3}{4}$

25. $\dfrac{1}{3}$

27. $k = 11$

29. $k = -5$

31. **a.** $\dfrac{3}{40}$

     b. The cost increases by $3 for every 40 miles you drive, or the cost increases by $0.075 for every mile you drive.

33. yes; The slopes are the same between the points.

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1. blue and red; They both have a slope of -3.

2. red and green; They both have a slope of $\dfrac{4}{3}$.

3. yes; Both lines are horizontal and have a slope of 0.

4. no; $y = 0$ has a slope of 0 and $x = 0$ has an undefined slope.

5. yes; Both lines are vertical and have an undefined slope.

7. blue and green; The blue line has a slope of 6. The green line has a slope of $-\dfrac{1}{6}$. The product of their slopes is $6 \cdot \left(-\dfrac{1}{6}\right) = -1$.

9. yes; The line $x = -2$ is vertical. The line $y = 8$ is horizontal. A vertical line is perpendicular to a horizontal line.

10. no; Both lines are vertical and have undefined slopes.