Answer Key Request

Here are 30 fill-in-the-blank questions related to the equation of a straight line:

Fill-in-the-Blanks:

1. The equation of a straight line in slope-intercept form is _____.
2. The general equation of a straight line is _____.
3. The slope of a vertical line is _____.
4. The slope of a horizontal line is _____.
5. The equation of a line with zero slope is _____.
6. If two lines are parallel, their slopes are _____.
7. If two lines are perpendicular, the product of their slopes is _____.
8. The distance between two points (x_1, y_1) and (x_2, y_2) is given by _____.
9. A line that passes through the origin has the form _____.
10. The slope of a line is the ratio of _____ to _____.
11. The equation of a line in point-slope form is _____.
12. The x-intercept of a line is the point where _____.
13. The y-intercept of a line is the point where _____.
14. A line that passes through the points (x_1, y_1) and (x_2, y_2) has a slope of _____.
15. If the slope of a line is positive, the line slants _____.
16. If the slope of a line is negative, the line slants _____.
17. The formula for the slope m given two points is _____.
18. The equation of a line in standard form is _____.
19. The equation of a line passing through two points (x_1, y_1) and (x_2, y_2) is _____.
20. A vertical line has an equation of the form _____.
21. A horizontal line has an equation of the form _____.
22. A line that has the same x-coordinate for all points is called a _____.
23. The slope of the line passing through the points $(2, 3)$ and $(4, 7)$ is _____.
24. The slope of the line passing through the points $(5, 10)$ and $(5, 20)$ is _____.
25. In the equation $y = mx + b$, the constant b represents the _____.
26. The slope-intercept form is useful for finding the _____ of the line.
27. The point where a line intersects the x-axis is called the _____.
28. The equation $2x + 3y = 6$ is written in _____ form.
29. To convert a line equation from general form to slope-intercept form, you must solve for _____.
30. The midpoint of the line segment joining two points is given by _____.

Key for the Fill-in-the-Blanks:

1. $y = mx + c$
2. $ax + by + c = 0$
3. Undefined

4. Zero
5. $y = c$ or $y = b$
6. Equal
7. -1
8. $\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$
9. $y = mx$
10. Rise, Run
11. $y - y_1 = m(x - x_1)$
12. $y = 0$
13. $x = 0$
14. $\frac{y_2 - y_1}{x_2 - x_1}$
15. Upwards
16. Downwards
17. $m = \frac{y_2 - y_1}{x_2 - x_1}$
18. $Ax + By = C$
19. $y - y_1 = \frac{y_2 - y_1}{x_2 - x_1}(x - x_1)$
20. $x = a$
21. $y = b$
22. Vertical Line
23. 2
24. Undefined
25. y-intercept
26. Slope and intercept
27. x-intercept
28. General
29. y

30. The midpoint of the line segment joining two points is given by $\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$.