Algebra 1 Slope-Intercept Form: Writing Equations of Lines

Common Core HSF-LE.A.2 Time: 30 min Total: 20 marks Two-sided: questions continue on the back

GASIF1

NAME or INITIALS (BLOCK CAPITALS, one letter per box)

ANSWER KEY — not for students, do not scan

ANSWERS — write each final answer in its box. Only these boxes are marked.

1	$y = 3x + 2$	2	$y = -\frac{1}{2}x + 4$	3	$y = 2x + 3$
4	$y = 4x - 3$	5	$y = 3x - 1$	6	$y = -2x + 3$
7	$y = -2x + 7$	8	$y = \frac{3}{2}x - 4$	9	$y = 4x - 5$
10	$y = -2x + 9$				

1 Write the equation of the line with slope 3 and y-intercept 2. **1 mark**

$$y = 3x + 2$$

answer in box 1 on the front

2 Write the equation of the line with slope $-\frac{1}{2}$ and y-intercept 4. **1 mark**

$$y = -\frac{1}{2}x + 4$$

answer in box 2 on the front

3 Write the equation of the line with slope 2 that passes through $(1,\ 5)$. **2 marks**

$$y = 2x + 3$$

answer in box 3 on the front

4 Write the equation of the line through $(0,\ -3)$ and $(2,\ 5)$. **2 marks**

$$y = 4x - 3$$

answer in box 4 on the front

Questions continue on the back. Only the answer boxes above are marked.

5 Write the equation of the line through $(1,\ 2)$ and $(3,\ 8)$. **2 marks**

$$\boldsymbol{y = 3x - 1}$$

answer in box 5 on the front

6 Write the equation of the line through $(-2,\ 7)$ and $(4,\ -5)$. **2 marks**

$$\boldsymbol{y = -2x + 3}$$

answer in box 6 on the front

7 Rewrite in slope-intercept form: **2 marks**

$$2x + y = 7$$

$$\boldsymbol{y = -2x + 7}$$

answer in box 7 on the front

8 Rewrite in slope-intercept form: **2 marks**

$$3x - 2y = 8$$

$$\boldsymbol{y = \frac{3}{2}x - 4}$$

answer in box 8 on the front

9 Write the equation of the line parallel to $y = 4x - 1$ that passes through $(2,\ 3)$. **3 marks**

$$\boldsymbol{y = 4x - 5}$$

answer in box 9 on the front

10 Write the equation of the line perpendicular to $y = \frac{1}{2}x + 1$ that passes through $(2,\ 5)$. **3 marks**

$$\boldsymbol{y = -2x + 9}$$

answer in box 10 on the front