

GED Math Worksheet

SECTION 1: Finding the Slope Using the Slope Formula

Directions: Use the slope formula to find the slope of the line that passes through each pair of points. Select the correct answer (A–D).

1. Find the slope of the line through (4, -2) and (2, 4).

- A. -3
- B. 3
- C. -2
- D. -1

2. Find the slope of the line through (1, 3) and (5, 7).

- A. 1
- B. 2
- C. 4
- D. 0

3. Find the slope of the line through (0, 0) and (6, -3).

- A. 2
- B. -2
- C. $-1/2$
- D. $1/2$

4. Find the slope of the line through (-2, 5) and (1, -4).

- A. -3
- B. 3
- C. -2
- D. -1

5. Find the slope of the line through (3, 2) and (3, -1).

- A. 0
- B. undefined
- C. -1
- D. 1

6. Find the slope of the line through (-1, -3) and (3, -3).

- A. 1
- B. -1
- C. 0
- D. undefined



7. Find the slope of the line through (2, 5) and (-2, -1).

- A. $-3/2$
- B. $2/3$
- C. $3/2$
- D. $-2/3$

8. Find the slope of the line through (-4, 6) and (2, -3).

- A. 2
- B. -2
- C. $-3/2$
- D. $3/2$

SECTION 2: Finding the Equation Using Slope-Intercept Form

Use the slope-intercept form $y = mx + b$ to find the equation of the line. Select the correct answer (A-D).

1. Find the equation of the line that passes through (1, -2) with slope -4.

- A. $y = -4x + 2$
- B. $y = -4x - 2$
- C. $y = 4x - 6$
- D. $y = -2x - 4$

2. Find the equation of the line that passes through (0, 5) with slope 3.

- A. $y = 3x + 5$
- B. $y = 5x + 3$
- C. $y = 3x - 5$
- D. $y = 3x + 0$

3. Find the equation of the line that passes through (2, 4) with slope $1/2$.

- A. $y = 1/2x + 2$
- B. $y = 2x + 1/2$
- C. $y = 1/2x + 3$
- D. $y = x + 2$

4. Find the equation of the line that passes through (-1, -3) with slope 2.

- A. $y = 2x - 1$
- B. $y = 2x - 3$
- C. $y = 2x - 5$
- D. $y = -2x - 5$



5. Find the equation of the line that passes through (3, 0) with slope -1.

- A. $y = -x + 3$
- B. $y = -x - 3$
- C. $y = x + 3$
- D. $y = -3x$

6. Find the equation of the line that passes through (-2, 4) with slope 0.

- A. $y = -2$
- B. $y = 0$
- C. $y = 4$
- D. $y = x$

7. Find the equation of the line that passes through (0, -1) with slope 2.

- A. $y = 2x - 1$
- B. $y = -2x - 1$
- C. $y = x - 2$
- D. $y = -x + 1$

8. Find the equation of the line that passes through (5, 2) with slope -3.

- A. $y = -3x + 17$
- B. $y = -3x + 5$
- C. $y = -3x - 2$
- D. $y = 3x + 2$

SECTION 3: Finding the Equation Using Point-Slope Form

Directions: Use the point-slope form $y - y_1 = m(x - x_1)$ to find the equation of the line. Select the correct answer (A-D).

1. Find the equation of the line that passes through (2, 1) with slope 3.

- A. $y - 1 = 3(x - 2)$
- B. $y + 1 = 3(x + 2)$
- C. $y - 2 = 1(x - 3)$
- D. $y = 3x + 2$

2. Find the equation of the line that passes through (0, 5) with slope -2.

- A. $y - 0 = -2(x - 5)$
- B. $y - 5 = -2x$
- C. $y + 5 = -2x$
- D. $y - 5 = -2(x - 0)$



3. Find the equation of the line that passes through $(-1, 3)$ with slope 4.

- A. $y - 3 = 4(x + 1)$
- B. $y + 1 = 3(x - 4)$
- C. $y - 1 = 4(x - 3)$
- D. $y - 3 = 4x - 1$

4. Find the equation of the line that passes through $(3, -2)$ with slope 0.

- A. $y - 3 = 0(x + 2)$
- B. $y + 2 = 0(x - 3)$
- C. $y + 3 = 0$
- D. $y - 2 = 3(x - 0)$

5. Find the equation of the line that passes through $(-2, -4)$ with slope 1.

- A. $y + 4 = 1(x + 2)$
- B. $y - 2 = 1(x - 4)$
- C. $y - 4 = x + 2$
- D. $y - 2 = x - 4$

6. Find the equation of the line that passes through $(4, 3)$ with slope -1.

- A. $y - 3 = -1(x - 4)$
- B. $y - 4 = -1(x - 3)$
- C. $y + 3 = x - 4$
- D. $y + 4 = -1(x + 3)$

7. Find the equation of the line that passes through $(5, 0)$ with slope 2.

- A. $y - 0 = 2(x - 5)$
- B. $y + 5 = 2x$
- C. $y = 2(x - 5)$
- D. $y - 2 = 5(x + 0)$

8. Find the equation of the line that passes through $(1, -3)$ with slope -2.

- A. $y + 3 = -2(x - 1)$
- B. $y - 3 = -2(x - 1)$
- C. $y + 1 = -2(x - 3)$
- D. $y - 1 = -2(x + 3)$



Answer Key

SECTION 1: Finding the Slope Using the Slope Formula

1. A
2. A
3. C
4. A
5. B
6. C
7. A
8. B

SECTION 2: Finding the Equation Using Slope-Intercept Form

1. A
2. A
3. C
4. C
5. A
6. C
7. A
8. A

SECTION 3: Finding the Equation Using Point-Slope Form

1. A
2. D
3. A
4. B



Algebra 104 PART 6 The Curse of the Vanishing Slope

5. A

6. A

7. A

8. A

