**Systems of Equations Pretest**

**Multiple Choice**

*Identify the letter of the choice that best completes the statement or answers the question.*

\_\_\_\_ 1. Identify the slope and *y*-intercept of *y* = *x*.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| a. | ; 7 | b. | ; 7 | c. | ; –7 | d. | ; –7 |

\_\_\_\_ 2. Graph *y* = *x* using the slope and *y*-intercept.

|  |  |  |  |
| --- | --- | --- | --- |
| a. |  | c. |  |
| b. |  | d. |  |

\_\_\_\_ 3. Write an equation for the line.



|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| a. | *y* = *x* | b. | *y* = *x* | c. | *y* = *x* | d. | *y* = *x* |

\_\_\_\_ 4. Write an equation for a line with a slope of 0 and a *y*-intercept of 1.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| a. |  | b. |  | c. |  | d. |  |

\_\_\_\_ 5. Write an equation for a line with a slope of 1 and a *y*-intercept of 0.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| a. |  | b. |  | c. |  | d. |  |

**Essay**

 6. Charlie is growing plants in his science class. The equation  relates the height of a plant *h* in centimeters to the numbers of weeks *w* since he planted the plant at 5 cm tall.

|  |  |
| --- | --- |
| **a.** | Graph the equation. |
| **b.** | Find the slope of the graph. What does the slope represent? |
| **c.** | Do all the points on the graph apply to Charlie’s situation? Explain. |

**slope y-intercept quiz**

**Answer Section**

**MULTIPLE CHOICE**

 1. ANS: A DIF: L1 REF: 3-4 Using the y-Intercept

OBJ: 3-4.1 Graphing an Equation in Slope-Intercept Form STO: 8FL MA.D.1.3.2, 8FL MA.D.2.3.1

TOP: 3-4 Example 1 KEY: y-intercept,slope-intercept form

MSC: NAEP A4d, CAT5.LV18.54, CTBS.LV18.54, ITBS.LV14.A, S9.Adv1.PRA, S10.Adv1.PRA, TV.LV18.14, TV.LV18.16

 2. ANS: B DIF: L1 REF: 3-4 Using the y-Intercept

OBJ: 3-4.1 Graphing an Equation in Slope-Intercept Form STO: 8FL MA.D.1.3.2, 8FL MA.D.2.3.1

TOP: 3-4 Example 2 KEY: y-intercept,slope-intercept form,slope

MSC: NAEP A4d, CAT5.LV18.54, CTBS.LV18.54, ITBS.LV14.A, S9.Adv1.PRA, S10.Adv1.PRA, TV.LV18.14, TV.LV18.16

 3. ANS: C DIF: L1 REF: 3-4 Using the y-Intercept

OBJ: 3-4.2 Writing an Equation for a Line STO: 8FL MA.D.1.3.2, 8FL MA.D.2.3.1

TOP: 3-4 Example 4 KEY: y-intercept,slope-intercept form,slope

MSC: NAEP A4d, CAT5.LV18.54, CTBS.LV18.54, ITBS.LV14.A, S9.Adv1.PRA, S10.Adv1.PRA, TV.LV18.14, TV.LV18.16

 4. ANS: A DIF: L1 REF: 3-4 Using the y-Intercept

OBJ: 3-4.2 Writing an Equation for a Line STO: 8FL MA.D.1.3.2, 8FL MA.D.2.3.1

TOP: 3-4 Example 3

KEY: y-intercept,slope-intercept form,writing an equation for a line,slope

MSC: NAEP A4d, CAT5.LV18.54, CTBS.LV18.54, ITBS.LV14.A, S9.Adv1.PRA, S10.Adv1.PRA, TV.LV18.14, TV.LV18.16

 5. ANS: B DIF: L1 REF: 3-4 Using the y-Intercept

OBJ: 3-4.2 Writing an Equation for a Line STO: 8FL MA.D.1.3.2, 8FL MA.D.2.3.1

TOP: 3-4 Example 3

KEY: y-intercept,slope-intercept form,writing an equation for a line,slope

MSC: NAEP A4d, CAT5.LV18.54, CTBS.LV18.54, ITBS.LV14.A, S9.Adv1.PRA, S10.Adv1.PRA, TV.LV18.14, TV.LV18.16

**ESSAY**

 6. ANS:

|  |  |  |
| --- | --- | --- |
| [4] | **a.** |  |
|  | **b.** | ; the number of centimeters the plant grows each week |
|  | **c.** | No; only the points in quadrant I apply. A plant cannot have a negative height, and the number of weeks cannot be negative. |
| [3] | two parts correct |
| [2] | one part correct |
| [1] | correct answers without explanations |

DIF: L2 REF: 3-4 Using the y-Intercept

OBJ: 3-4.1 Graphing an Equation in Slope-Intercept Form STO: 8FL MA.D.1.3.2, 8FL MA.D.2.3.1

TOP: 3-4 Example 2

KEY: y-intercept,slope-intercept form,slope,multi-part question,rubric-based question,extended response,reasoning,writing in math,word problem,problem solving

MSC: NAEP A4d, CAT5.LV18.54, CTBS.LV18.54, ITBS.LV14.A, S9.Adv1.PRA, S10.Adv1.PRA, TV.LV18.14, TV.LV18.16