Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |
| --- |
| **Solve for the indicated variable.**  |
| **1.** $A=5x+y$ (y)A. $y=\frac{A}{5x}$B. y$=\frac{A-x}{5}$C. y$=\frac{1}{A+5x}$D. $y=A-5x$ | **2.** *E =* $\frac{M Cx^{2}}{T}$ *(M)* A. M = $\frac{ET}{Cx^{2}}$B. M = $\frac{E+T}{C+ x^{2}}$C. M = $\frac{Ex^{2}}{TC}$D. M = $\frac{-C-x^{2}}{T}$ |
| **Justify the missing step.** |
| **3.**

|  |  |
| --- | --- |
| **Equation** | **Steps** |
| **3x + 12 = 8x - 18** | **Original** |
| **12 = 5x - 18** | ??????? |
| **30 = 5x** | **Addition Prop. of Equality** |
| **6 = x** | **Division Prop. of Equality** |

A. Distributive PropertyB. Associative PropertyC. Subtraction Property of EqualityD. Division Property of Equality | **4.**

|  |  |
| --- | --- |
| **Equation** | **Steps** |
| **3(5x+1) = 13x +5** | **Original** |
| **15x +3 = 13x +5** | ?????? |
| **2x + 3 = 5** | **Subt. Property of Equality** |
| **2x = 2** | ?????? |
| **X = 1** | **Division Property of Equality** |

 A. Distributive Property/Combine Like TermsB. Distributive Property/Subt. Prop of EqualityC. Combining Like Terms/Distributive PropertyD. Combining Like Terms/Subt. Prop of Equality |
| **5. Identify the slope and**  **y-intercept, then graph.**y = 2x -4**m = \_\_\_\_\_\_\_\_****b = \_\_\_\_\_\_\_\_** |
| **6.** The formula *P = 2L + 2W*  tells the perimeter of a package. a) Solve the equation for l. b) What is the length of a package that has a perimeter of 20 cm and a width of 5? |
| **7.** Rewrite the equation into slope-intercept form: $y+6x=12$ |
| **8.** Rewrite the equation into slope-intercept form. Then graph the line. $x+y-3=0$  |
| **9.** Write a linear equation to model the following situation:Joe has 4 less than 7 times as many shirts as Mark. Joe and Mark have 140 shirts. |