



# Algebra

## Worksheet 1

Choice *E*, in multiple-choice questions, is always: *I request help from the teacher.*

You may mark *E* in addition to one other choice if you think that you have the right answer to the question but you do not feel that you have a complete understanding of the problem.

Your teacher will decide whether to use the two-point or four-point scoring rubric for problems that use numbers, pictures, or words to justify/explain your answer(s). You may request help for these questions, too. Write the word “teacher” by your answer(s).

- Evaluate  $5x + 3$  when  $x = 2$ .  
A. 25                      B. 13                      C. 10                      D. 7                      E. Teacher
- Solve for  $y$ :  $2(y+1) = 14$   
A. 7                      B.  $-7$                       C. 6                      D.  $\frac{13}{2}$                       E. Teacher
- Solve for  $m$ :  $3m \geq 117$   
A.  $m < 39$                       B.  $m \geq 39$                       C.  $m \leq 39$                       D.  $m > 50$                       E. Teacher
- A sunflower grows at a rate of 4 in. per week. The sunflower was 6 in. tall when Chris brought it home from an experiment at school. The expression of the growth of the sunflower after the weeks ( $w$ ) that Chris has the plant at home is  $4w + 6$ . What is the height of the plant after 4 weeks at Chris’s house?  
A. 22 ft.                      B. 14 in.                      C. 1 ft. 10 in.                      D. 1 ft. 2 in.                      E. Teacher
- What is the solution for  $2(n+3) < 14$ ?  
A.  $n < 4$                       B.  $n \geq 4$                       C.  $n < 5$                       D.  $n > 1$                       E. Teacher
- Which value below is a possible solution for  $2(p+5) \leq 10$ ?  
A.  $p = 1$                       B.  $p = 2$                       C.  $p = 0$                       D.  $p = 3$                       E. Teacher
- The perimeter of a rectangle can be found by using the formula  $P = 2(L + W)$ , where  $L$  represents the measure of the length and  $W$  represents the measure of the width (all in the same units). If the perimeter of the rectangle is 80 inches and the width is 5 inches, what is the length?  
A. 70 in.                      B. 14 in.                      C. 10 in.                      D. 35 in.                      E. Teacher



8. The formula to convert Celsius degree temperature to Fahrenheit degrees is

$$F = \frac{9}{5}C + 32. \text{ What Fahrenheit temperature is equivalent to } 40^{\circ}\text{C?}$$

- A.  $104^{\circ}$                       B.  $32^{\circ}$                       C.  $40^{\circ}$                       D.  $100^{\circ}$                       E. Teacher

9. The formula for the area of a circle is  $A = \pi r^2$ . If the area of the circle is 78 sq. in., then the radius is estimated to be...

- A. 25 in.                      B. 24 in.                      C. 4 in.                      D. 5 in.                      E. Teacher

10. Which value below is a possible for solution for  $5(m-4) < 10$ ?

- A. 6                      B. 7                      C. 5                      D. 10                      E. Teacher