

Module 4 Confirmation Test Review

1. Nancy planted 55 marigolds yesterday. Today she continues working and plants flowers at a rate of 20 marigolds an hour for the rest of her shift.

- a. Write a linear equation for the total number of marigolds planted (y) based on the number of hours worked today (x).
- b. Use your linear equation to find the number of hours Nancy would have to work today to finish planting a total of 210 marigolds.

2. Solve for x : $3(2x + 8) + 6 = 5x - 4(x - 2)$

3. Solve for x : $\frac{1}{2}x + 5 = \frac{5}{4}x - 7$

4. Solve for x : $5x - 3(x + 2) = 2x + 8$

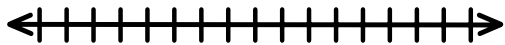
5. The area of a triangle can be found using the formula $A = \frac{1}{2}bh$ where A is the area, b is the length of the base, and h is the height. Find the height of a triangle whose area is 15 square inches and base measures 5 inches.

6. Solve for L : $P = 2L + 2W$

7. Bob wants to fence a rectangular area in his yard for a dog. He wants the length of the pen to be twice the width. He has 92 feet of fencing. If he used all the fencing, then how wide and how long can he make the pen?

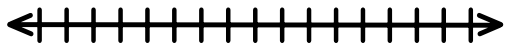
8. a. Solve the inequality $\frac{3}{4}(3x - 2) < \frac{1}{2}x + \frac{9}{8}$

b. Graph the solution on a number line.



9. a. Solve the inequality $-8 \leq 2x + 4 < 7$

b. Graph the solution on a number line.



10. Solve $|2x - 3| = 7$

1. a) $y = 20x + 55$ b) 7.75 hours

2. $x = \frac{-22}{5}$

3. $x = 16$

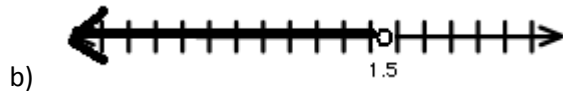
4. No solution

5. 6 inches

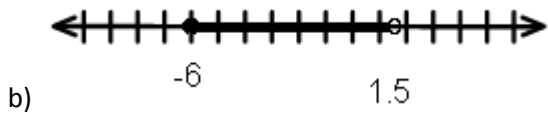
6. $L = \frac{P-2W}{2}$

7. $15\frac{1}{3}$ feet by $30\frac{2}{3}$ feet

8. a) $x < \frac{3}{2}$



9. a) $-6 \leq x < 1.5$



10. $x = 5$ or $x = -2$