Name_____ Date _____

2.4 Puzzle Time

Where Do Young Tigers Swim?

Write the letter of each answer in the box containing the exercise number.

Solve the inequality.

1. $4x - 7 < 9$

2. $-11 > 10 - 7x$

3. $\frac{x}{6} + 5 > 8$

4. $-\frac{x}{2} + 12 \geq 14$

5. $6x - 23 > 25$

6. $6 - \frac{x}{5} \geq -2$

7. $3 \geq -3(x - 13)$

8. $16 - 4x > 9 - 5x$

9. $2x + 7 \leq 2x + 8$

10. $-6(x - 1) < -14(x - 5)$

11. $12x + 4x - 11 \geq 16x + 17$

12. $3(1 - x) + 10x \leq 9(x - 2) + 7$

13. The students in charge of the class booth at a carnival would like to earn \$3 for every item they sell. They spent \$55 for the materials to make the items. Solve the inequality $3x - 55 \geq 65$, which represents how many items they need to sell to make a profit of at least \$65.

14. A triangle has a base of 14 centimeters and a height of $(3x - 4)$ centimeters. The area of the triangle is greater than 56 centimeters. Solve the inequality $\frac{1}{2}(14)(3x - 4) > 56$ to find the possible values of x.

Answers

N. all real numbers

K. $x \geq 7$

P. $x < 8$

E. $x > 3$

O. $x < 4$

I. $x > 8$

O. $x \geq 40$

Y. $x \leq -4$

T. $x > 4$

L. $x > -7$

T. no solution

H. $x \geq 12$

I. $x \leq 40$

T. $x > 18$

5	9		3	7	2		12	6	14	11	4		10	1	13	8