Name _**Key**_ Date _____

4.1 Puzzle Time

What Do You Call A Bull That's Sleeping?

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

Write the word sentence as an inequality.

1. A number x is greater than 25.8.

$$X > 25.8 \quad Ⓛ$$

2. Twice a number x is at most $-\dfrac{3}{5}$.

$$2x \le \dfrac{-3}{5} \quad Ⓔ$$

3. A number x minus 9.3 is more than 4.6.

$$X - 9.3 > 4.6 \quad Ⓛ$$

4. A number x added to 11.7 is less than 14.

$$X + 11.7 < 14 \quad Ⓤ$$

Tell whether the given value is a solution of the inequality.

5. $x - 3.6 \le 2.8;\ x = 6.7$

$$6.7 - 3.6 \le 2.8$$
$$3.1 \le 2.8$$
$$Ⓝⓞ \quad Ⓑ$$

6. $\dfrac{5}{6}x > -10;\ x = -6$

$$\tfrac{5}{6}(-6) > -10$$
$$-5 > -10 \;Ⓨⓔⓢ \quad Ⓓ$$

Answers

U. $11.7 + x < 14$

L. $x > 25.8$

A.

3.2
0 1 2 3 4 5 6

D. yes

E. $2x \le -\dfrac{3}{5}$

R.

−10 −9 −8 −7 −6 −5 −4

L. $x - 9.3 > 4.6$

Z.

$2\frac{1}{2}$ $2\frac{3}{4}$ 3 $3\frac{1}{4}$ $3\frac{1}{2}$ $3\frac{3}{4}$ 4

B. no

O.

−14 −13 −12 −11 −10 −9 −8

Match each inequality with its graph.

7. $x \le -7$

Ⓡ

8. $x > 3.2$

Ⓐ

9. $x < 3\frac{1}{4}$

Ⓩ
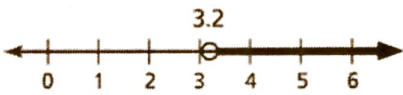
10. $x \ge -11$
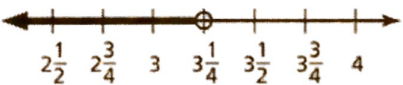
O

8		5	4	1	3	6	10	9	2	7
A		B	U	L	L	D	O	Z	E	R

4.2 Puzzle Time

Did You Hear About The...

A The	**B** baseball	**C** game	**D** between	**E** the	**F** collars
G and	**H** the	**I** shirts	**J** that	**K** ended	**L** in
M a	**N** Tie				

Complete each exercise. Find the answer in the answer column. Write the word under the answer in the box containing the exercise letter.

**Solve the inequality.**

USE A SEPARATE SHEET OF PAPER!

A. $x + 5 \geq 20$
    The

B. $x - 4 > 6$
    baseball

C. $6 \leq 9 + x$
    game

D. $3 + x \leq -2$
    between

E. $-17 \leq x - 8$
    the

F. $x - 1 < 2$
    collars

G. $x - 10 \leq -16$
    and

H. $x + \dfrac{1}{3} \geq 3$
    the

I. $\dfrac{3}{5} \geq x + \dfrac{1}{5}$
    shirts

J. $-4.4 < x - 7.2$
    that

K. $\dfrac{11}{4} > x + \dfrac{9}{4}$
    ended

L. $-\dfrac{5}{12} \geq x - \dfrac{13}{12}$
    in

M. $x + 0.4 < -0.8$
    A

O. To play on the football team, a seventh grader must weigh no more than 110 pounds. Your neighbor is in seventh grade and weighs 94 pounds. Write and solve an inequality that represents how much weight your neighbor can gain and still meet the requirement.
    Tie

Left answer column:

Answer	Word
$x \geq -3$	GAME
$x \leq \dfrac{2}{3}$	IN
$x \leq -6$	AND
$x \leq 16$	TIE
$x \geq 15$	THE
$x < -5$	CATCHER
$x < 3$	COLLARS
$x > 2.8$	THAT
$x \leq \dfrac{2}{5}$	SHIRTS

Right answer column:

Answer	Word
$x \geq 2\dfrac{2}{3}$	THE
$x > 10$	BASEBALL
$x < \dfrac{1}{2}$	ENDED
$x \geq 1.1$	WHICH
$x > 1$	MITT
$x \geq -9$	THE
$x \leq 2$	SOCKS
$x < -1.2$	A
$x \leq -5$	BETWEEN

4.2 Puzzle Time

A. $x + 5 \geq 20$
$-5 \quad -5$
$\boxed{x \geq 15}$

B. $x - 4 > 6$
$+4 \quad +4$
$\boxed{x > 10}$

C. $6 \leq 9 + x$
$-9 \quad -9$
$-3 \leq x$
$\boxed{x \geq -3}$

D. $\frac{2}{3} + x \leq -2$
$-\frac{2}{3} \qquad -\frac{2}{3}$
$\boxed{x \leq -5}$

E. $-17 \leq x - 8$
$+8 \quad +8$
$-9 \leq x$
$\boxed{x \geq -9}$

F. $x - 1 < 2$
$+1 \quad +1$
$\boxed{x < 3}$

G. $x - 10 \leq -16$
$+10 \quad +10$
$\boxed{x \leq -6}$

H. $x + \frac{1}{3} \geq 3$
$-\frac{1}{3} \quad -\frac{1}{3}$
$\boxed{x \geq 2\frac{2}{3}}$

I. $\frac{3}{5} \geq x + \frac{1}{5}$
$-\frac{1}{5} \qquad -\frac{1}{5}$
$\frac{2}{5} \geq x$
$\boxed{x \leq \frac{2}{5}}$

J. $-4.4 < x - 7.2$
$+7.2 \quad +7.2$
$2.8 < x$
$\boxed{x > 2.8}$

K. $\frac{11}{4} > x + \frac{9}{4}$

$\quad -\frac{9}{4} \qquad -\frac{9}{4}$

$\qquad \frac{2}{4} > x$

$\boxed{x > \frac{2}{4}}$

L. $-\frac{5}{12} \geq x - \frac{18}{12}$

$\quad +\frac{13}{12} \qquad +\frac{13}{12}$

$\qquad \frac{8}{12} \geq x$

$\boxed{x \leq \frac{2}{3}}$

M. $x + 0.4 < -0.8$

$\quad -0.4 \qquad -0.4$

$\boxed{x < -1.2}$

O. $x + 94 \leq 110$

$\quad -94 \qquad -94$

$\qquad x \leq 16$