

Algebra I
3.6 Worksheet #1
Inequalities

NAME: _____
DATE: _____ HOUR: _____

For $x = -1$, determine whether each inequality is true or false.

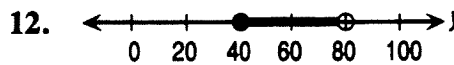
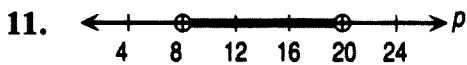
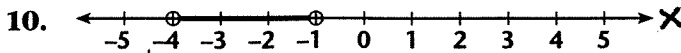
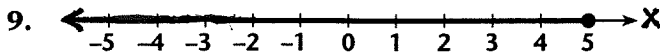
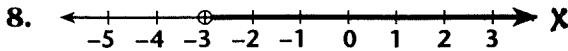
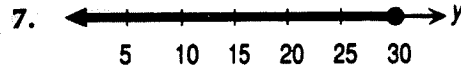
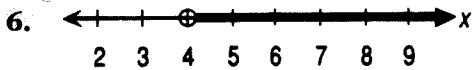
1. $x - 1 > 0$ $-1 - 1 > 0$ 2. $-x > 0$ $-(-1) > 0$
3. $x \leq 5 - 6$ $-1 \leq 5 - 6$ 4. $x + 2 \geq 1$ $-1 + 2 \geq 1$

Wholesale Pet Supplies uses the table shown to determine shipping and handling charges.

SHIPPING AND HANDLING CHART RESIDENTIAL				For orders over \$145 there is no regular shipping charge.
If your order is:	ZONE 1	ZONE 2	ZONE 3	
\$25.00 to \$50.00	\$5.95	\$7.35	\$8.35	
\$50.01 to \$75.00	\$6.40	\$8.25	\$9.95	
\$75.01 to \$145.00	\$7.85	\$9.95	\$11.95	

5. Write an inequality to represent the possible amount A , of an order to be shipped to zone 3 if the shipping and handling cost is \$9.95.

Write an inequality that describes the points on the number lines.



In 13–16, graph the inequality given or suggested by the situation.

13. I weigh between 40 kg and 50 kg.



14. Our teacher is at least 30 years old but younger than 55.



15. $-2 < m$ $m >$



16. $20 \geq c$ $c \leq$



**???? Trivia Question ????
Records**

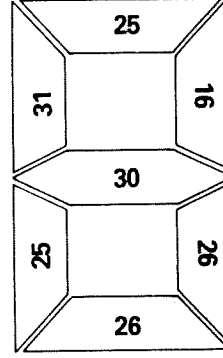
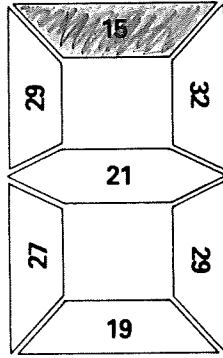
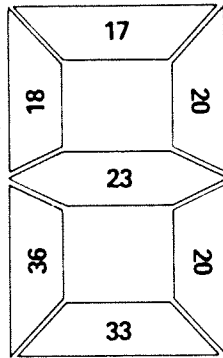
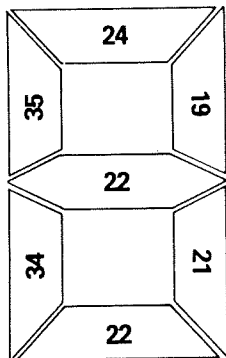
The oldest working clock, at Salisbury Cathedral in London, was made in the year _____.

To check your answer:

- First use a ruler to match each inequality with its graph.
- Each line you draw will cross a number.
- Then shade in each piece of the digital Decoder containing one of the crossed numbers. (Some numbers appear in the Decoder more than once.)
- Read the final digital display.

		-5	-4	-3	-2	-1	0	1	2	3	4	5	
1. $n > -3$	15	a.											
2. $n < -3$	16	b.											
3. $n \geq -3$	18	c.											
4. $n \leq -3$	19	d.											
5. $n > 3$	20	e.											
6. $n < 3$	21	f.											
7. $n \geq 3$	22	g.											
8. $n \leq 3$	23	h.											
9. $n < \frac{1}{2}$	24	i.											
10. $n > \frac{1}{2}$	25	j.											
11. $n \leq \frac{1}{2}$	26	k.											
12. $n \geq \frac{1}{2}$	27	l.											
13. $n < -1\frac{1}{2}$	28	m.											
14. $n > -1\frac{1}{2}$	29	n.											
	30												
	31												
	32												
	33												
	34												
	35												
	36												

DECODER



Answer: _____ A.D.