

Name: _____



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1) True or False?

a) $6 < 4$	False	d) $7 < 11$	True	g) $15 \leq 5$	False	j) $2 < 19$	True
b) $7 < 9$	True	e) $7 \leq 11$	True	h) $7 \geq 7$	True	k) $23 \geq 4$	True
c) $9 > 7$	True	f) $8 < 8$	False	i) $8 \geq 9$	False	l) $13 < 9$	False

2) List the first 5 integers which satisfy the following inequalities:

a) $x < 7$	6, 5, 4, 3, 2	f) $6 < x$	7, 8, 9, 10, 11
b) $x \geq 4$	4, 5, 6, 7, 8	g) $x \leq 2$	2, 1, 0, -1, -2
c) $x > 12$	13, 14, 15, 16, 17	h) $11 \geq x$	11, 10, 9, 8, 7
d) $x \leq 15$	15, 14, 13, 12, 11	i) $21 \leq x$	21, 22, 23, 24, 25

3) List the first 5 integers which satisfy the following inequalities:

a) $x < -1$	-2, -3, -4, -5, -6	e) $-5 < x$	-4, -3, -2, -1, 0
b) $x \geq -5$	-5, -4, -3, -2, -1	f) $x \leq -5$	-5, -6, -7, -8, -9
c) $x > -4$	-3, -2, -1, 0, 1	g) $-3 \geq x$	-3, -4, -5, -6, -7
d) $x \leq -2$	-2, -3, -4, -5, -6	h) $-6 \leq x$	-6, -5, -4, -3, -2

4) List the integers which satisfy the following inequalities:

a) $2 < x < 7$	3, 4, 5, 6	e) $-2 < x \leq 4$	-1, 0, 1, 2, 3, 4
b) $6 < x \leq 9$	7, 8, 9	f) $6 < x < 8$	7
c) $0 \leq x \leq 5$	0, 1, 2, 3, 4, 5	g) $-5 \leq x \leq 1$	-5, -4, -3, -2, -1, 0, 1
d) $8 \leq x < 13$	8, 9, 10, 11, 12	h) $5 \leq x < 6$	5

5) Insert either $<$ or $>$ inequality symbol in the space provided:

a) 2 $<$ 8	c) 2 $>$ -5	e) -1 $<$ 3	g) 0 $>$ -4	i) 2 $>$ 0 $>$ -1
b) -6 $<$ 9	d) 6 $>$ -6	f) -5 $>$ -8	h) 3 $>$ -2	j) -3 $<$ -1 $<$ 2

Exam question:

List all the integers that satisfy both these inequalities:

$$x < -1 \text{ and } x \geq -5$$

-5, -4, -3, -2

