

New Bedford Public Schools
Division of Adult & Continuing Education

New Bedford High School Evening Extension

2019 – 2020 School Year
Trimester III

Learning Packet #3
for
Algebra I

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Email Mr. Alves with questions/concerns regarding this packet at the email address listed above.

Due date: May 4, 2020



NOTE:

The Google Class Code

for your

Algebra I class is:

74i52bc

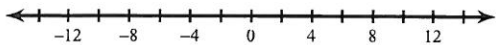
You can also connect with Mr. Alves via remind

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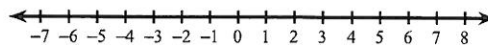
Absolute Value Inequalities

Solve each inequality and graph its solution.

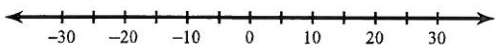
1) $\left| \frac{n}{4} \right| \leq 3$



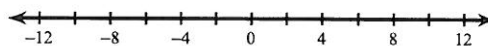
2) $|-9v| \leq 54$



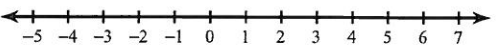
3) $\left| \frac{x}{6} \right| \geq 5$



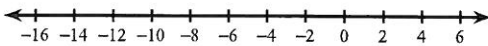
4) $|-6b| \leq 60$



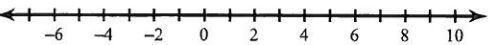
5) $|-8n| < 32$



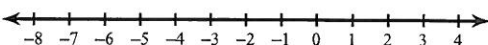
6) $|x + 5| < 9$



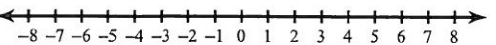
7) $|4v - 9| \leq 27$



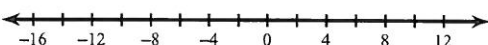
8) $|10 + 4x| < 14$



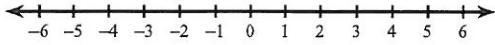
9) $|3 - 9a| \leq 60$



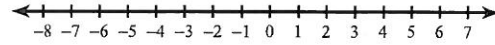
10) $|7x + 4| \geq 74$



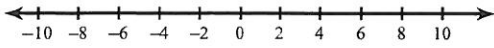
11) $|n| - 3 > -2$



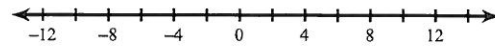
12) $|k| - 6 \leq -1$



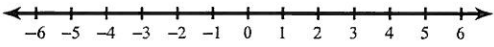
13) $|n| + 4 < 12$



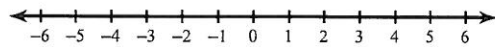
14) $|x| + 7 > 16$



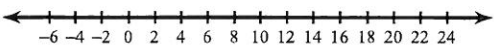
15) $|p| - 3 \leq 0$



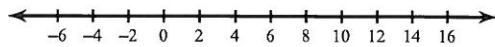
16) $|m| + 5 < 9$



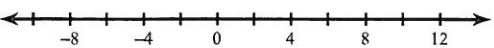
17) $|b - 8| + 10 > 22$



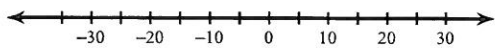
18) $\frac{|x - 4|}{5} \leq 2$



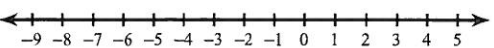
19) $-3 + |n - 2| > 5$



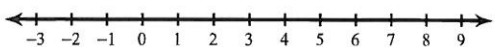
20) $\frac{|3 + r|}{7} \leq 5$



21) $\frac{|2 + 3x|}{2} \geq 5$



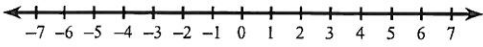
22) $8 + |4v - 7| \geq 17$



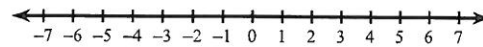
Graphing Inequalities

Draw a graph for each inequality.

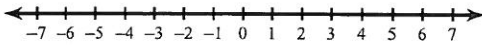
1) $n \leq -5$



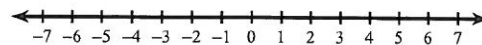
2) $n \leq 5$



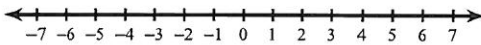
3) $x < 1$



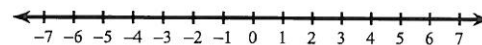
4) $r > 2$



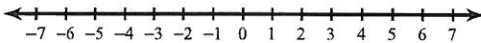
5) $n > 5$



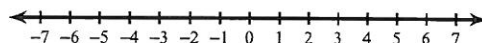
6) $r \leq -2$



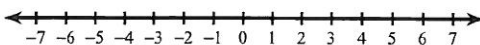
7) $k \leq -2$



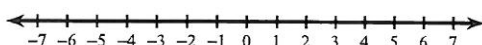
8) $m < -5$



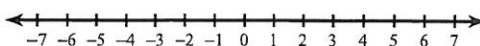
9) $x \geq 2$



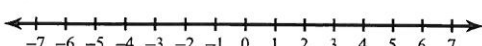
10) $-5 \geq v$



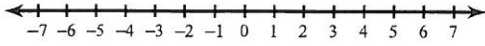
11) $-2 \geq v$



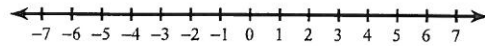
12) $x < 5$



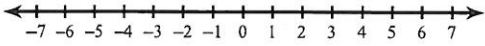
13) $-x \geq 2$



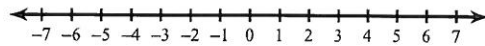
14) $5 \geq -a$



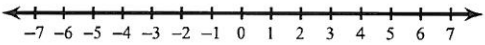
15) $x \leq 2$



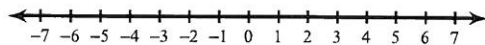
16) $x \leq 5$



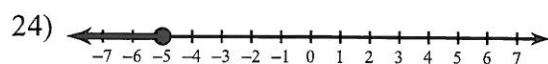
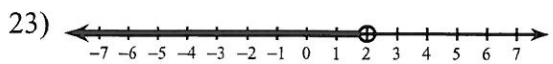
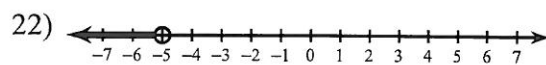
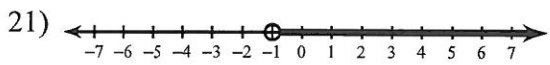
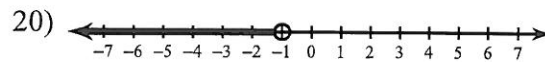
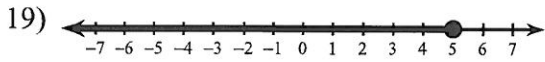
17) $-5 > b$



18) $-2 > b$



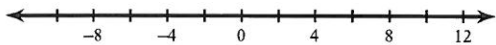
Write an inequality for each graph.



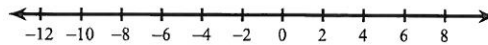
Compound Inequalities

Solve each compound inequality and graph its solution.

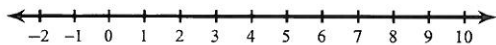
1) $m - 2 < -8$ or $\frac{m}{8} > 1$



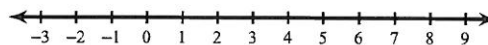
2) $-1 < 9 + n < 17$



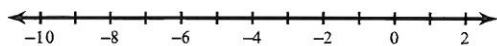
3) $2x < 10$ or $\frac{x}{2} \geq 3$



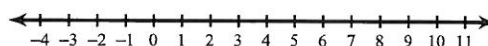
4) $x + 8 \geq 9$ and $\frac{x}{7} \leq 1$



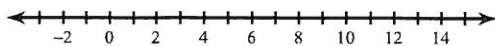
5) $-3 \leq \frac{p}{2} < 0$



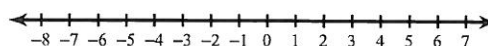
6) $r + 5 \geq 12$ or $\frac{r}{9} < 0$



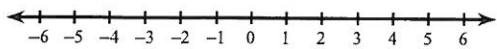
7) $7v - 5 \geq 65$ or $-3v - 2 \geq -2$



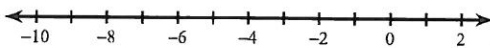
8) $-10b + 3 \leq -37$ or $3b - 10 \leq -25$



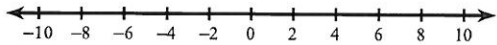
9) $-1 + 5n > -26$ and $7n - 2 \leq 12$



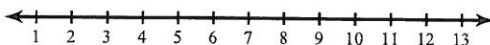
10) $-50 < 7k + 6 < -8$



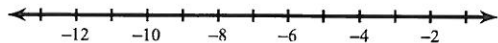
11) $8x + 8 \geq -64$ and $-7 - 8x \geq -79$



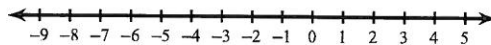
12) $2n + 7 \geq 27$ or $3 + 3n \leq 30$



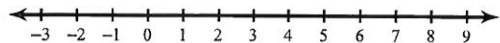
13) $-36 < 3p - 6 < -15$



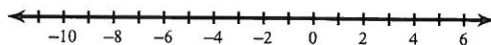
14) $-1 - 10a < -1$ or $10 + 3a \leq -5$



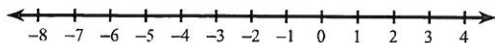
15) $3n + 2 < -2 + 7n$ or $8n - 4 \leq 3n - 4$



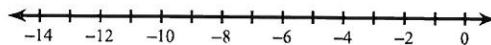
16) $8r - 5 \geq 6r - 1$ or $4 + 4r \leq 3r - 3$



17) $5x - 5 > -7x - 5$ or $3x + 5 \leq x - 1$



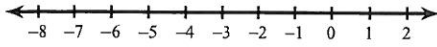
18) $6 + 7m < 6m - 5$ or $3m - 7 < 5 + 6m$



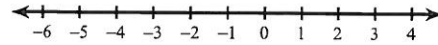
Multi-Step Inequalities

Solve each inequality and graph its solution.

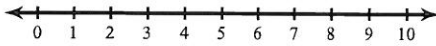
1) $3 < -5n + 2n$



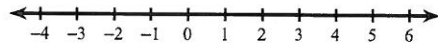
2) $6x + 2 + 6x < 14$



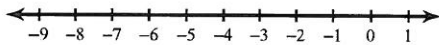
3) $-p - 4p > -10$



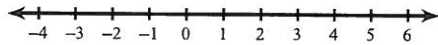
4) $18 \geq 5k + 4k$



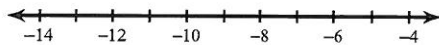
5) $9 \geq -2m + 2 - 3$



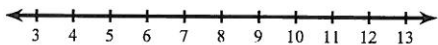
6) $-3 - 6(4x + 6) > -111$



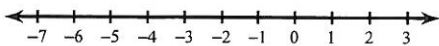
7) $6 - 4(6n + 7) \geq 122$



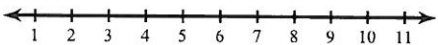
8) $-138 \geq -6(6b - 7)$



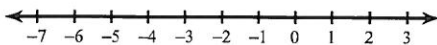
9) $167 < 6 + 7(2 - 7r)$



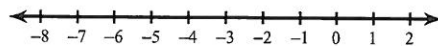
10) $5(6 + 3r) + 7 \geq 127$



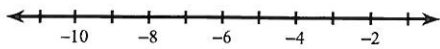
11) $-8x + 2x - 16 < -5x + 7x$



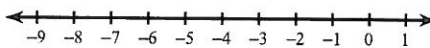
12) $-1 - 6x - 6 > -11 - 7x$



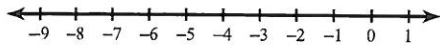
13) $a - 6 \leq 15 + 8a$



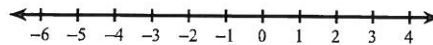
14) $13 + 2v - 8 + 6 > -7 - v$



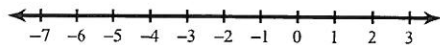
15) $-5n - 6n \leq 8 - 8n - n$



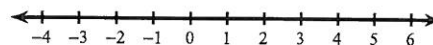
16) $-x < -x + 7(x - 2)$



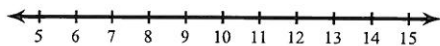
17) $-5n + 6 \geq -7(5n - 6) - 6n$



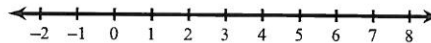
18) $3(p - 3) - 5p > -3p - 6$



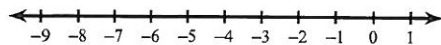
19) $28 - k \geq 7(k - 4)$



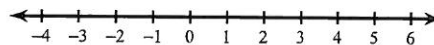
20) $28 - 7x \leq -4(-7x - 7)$



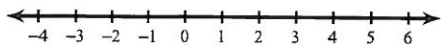
21) $-6(1 + 7k) + 7(1 + 6k) \leq -2$



22) $-2(2 - 2x) - 4(x + 5) \leq -24$



23) $3(1 - 2x) > 3 - 6x$



24) $-2(5 + 6n) < 6(8 - 2n)$

