

Intermediate Algebra Skill

Solving Compound Linear Inequalities: Negative Integer Coefficients

Solve the following Compound Linear Inequalities:

1) $-40 \leq -5k \leq 5$

2) $30 \leq -5v < 5$

3) $6b + 5 \geq 23$ or $-b + 2 > 1$

4) $10 + r \geq 15$ or $-6r > 0$

5) $-29 < -9r + 7 < 79$

6) $7 - p < -1$ or $7 - 6p \geq -17$

7) $-24 < -5n - 4 < 21$

8) $8 < -2 - 5n \leq 28$

9) $-3 \leq -m + 5 < 15$

10) $2 < 2 - 4n \leq 6$

11) $-61 \leq 9 - 7x < 16$

12) $-38 < 2 - 4x \leq 30$

13) $4 \leq 8 - 9(w + 3) < 9$

14) $15 < 12 - 7(w + 2) \leq 21$

Answers to Solving Compound Linear Inequalities: Negative Integer Coefficients

1) $-1 \leq k \leq 8$

2) $\emptyset$

3) $b \geq 3$ or $b < 1$

4) $r \geq 5$ or $r > 0$

5) $-8 < r < 4$

6) $p > 8$ or $p \leq 4$

7) $-5 < n < 4$

8) $-6 \leq n \leq -2$

9) $-10 < m \leq 2$

10) $-1 \leq n < 0$

11) $-1 < x \leq 10$

12) $-7 \leq x < 10$

13) $-\frac{28}{9} < w \leq -\frac{23}{9}$

14) $-\frac{23}{7} \leq w < -\frac{17}{7}$