

## Intermediate Algebra Skill

### Solving Linear Inequalities, Using Multiplication (Division) Property; Negative Integer Coefficients

Solve the linear inequalities:

$$1) -9t < -81$$

$$2) -8x \geq 24$$

$$3) -2z \leq 15$$

$$4) -3y > -12$$

$$5) -4w < 52$$

$$6) -5s \leq 135$$

$$7) -6a > -72$$

$$8) -7b \geq 78$$

$$9) -8c < 40$$

$$10) -9x \geq 126$$

**Answers to Solving Linear Inequalities, Using Multiplication (Division) Property;  
Negative Integer Coefficients**

1)  $\{t|t > 9\}; (9, \infty)$

2)  $\{x|x \leq -3\}; (-\infty, -3]$

3)  $\{z|z \geq -\frac{15}{2}\}; \left[-\frac{15}{2}, \infty\right)$

4)  $\{y|y < 4\}; (-\infty, 4)$

5)  $\{w|w > -13\}; (-13, \infty)$

6)  $\{s|s \geq -27\}; [-27, \infty)$

7)  $\{a|a < 12\}; (-\infty, 12)$

8)  $\{b|b \leq -\frac{78}{7}\}; \left(-\infty, -\frac{78}{7}\right]$

9)  $\{c|c > -5\}; (-5, \infty)$

10)  $\{x|x \leq -14\}; (-\infty, -14]$