

TOPIC: **1.0A Prerequisite Skills for Chapter 1**

NAME:

DATE:

ESSENTIAL QUESTIONS: **How are algebraic evaluating and solving related to finding midpoint values and locations?**

QUESTIONS:

**Vocabulary:**

absolute value

substitution

solving linear equations

midpoint

**A1. Evaluate the expression**

- a.  $|7 - 11|$     b.  $|5 + 12|$     c.  $-2|51 - 100|$     d.  $|-18 - 7|$

**A2. Evaluate the expression when  $x = -2$  and  $y = 5$ .**

- a.  $5x$     b.  $30 + -xy$     c.  $10x^2y^2$     d.  $50 - 4x + 3y$

**A3. Solve the linear equation.**

- a.  $510 = -3w$     b.  $7v - 32 + 4v = 45$     c.  $9 - h = 6h + 107$

SUMMARY:

QUESTIONS:

**A4. Find the midpoint of the segment with the given endpoints.**

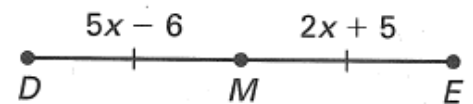
a.  $S(4, -1)$  and  $T(6, 0)$

b.  $G(-2, -8)$  and  $H(-3, -12)$

**A5. Find the coordinates of endpoint  $S$  of  $\overline{RS}$  if  $R(11, -5)$  and the midpoint of  $\overline{RS}$  is  $(-4, -4)$ .**

**A6. Find the tri-section points,  $D$  and  $E$ , of  $\overline{JC}$  if  $J(-3, 4)$  and  $C(12, -23)$ .**

**A7. Find the length of segment  $DE$ .**



**A8. Find the midpoint of  $\overline{TS}$ .**

