

# Problems of the Week # 1

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. The expression  $-[x - 3(2x - 1) + 2]$  is equivalent to which expression listed below?

- A.  $6x^2 + 1$       B.  $5x - 3$       C.  $5x - 5$       D.  $5x + 1$       E.  $-6x + 1$

2. Simplify. Use positive exponents in the answer:  $\left(\frac{3p^4v^{-2}}{s^4}\right)^{-2}$

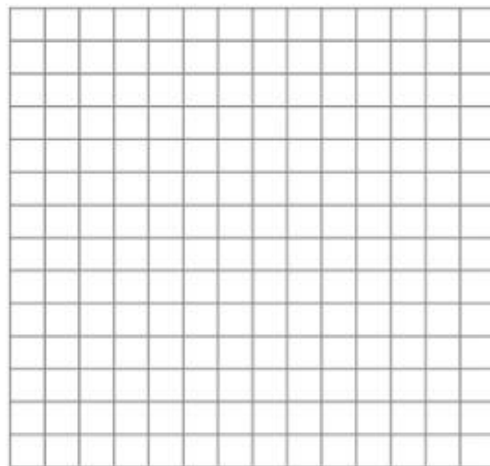
- A.  $\frac{3p^8v^4}{s^6}$       B.  $\frac{-9s^8v^4}{p^8}$       C.  $\frac{3p^8v^4}{s^8}$       D.  $\frac{s^8v^4}{9p^8}$       E.  $\frac{s^8}{9p^8v^4}$

3. Solve.  $-42x - 42 \leq -6(6x + 3)$

- A.  $x \leq -4$       B.  $x > -4$       C.  $x \geq -4$       D.  $x < -4$       E.  $x \geq 4$

4. If the coordinates of one endpoint of a line segment are  $(2, 6)$  and the midpoint of the segment is  $(-3, 6)$ , what are the coordinates of the other endpoint of the segment?

- A.  $(-8, 6)$       B.  $(7, 6)$       C.  $(2, 1)$       D.  $\left(-\frac{1}{2}, 6\right)$       E. 5



5. A rectangle has a length that is 9 feet longer than it is wide. If the area of the rectangle is 90 square feet, find the length.

- A. 6 ft      B. 10 ft      C. 14 ft      D. 15 ft      E. 18 ft