

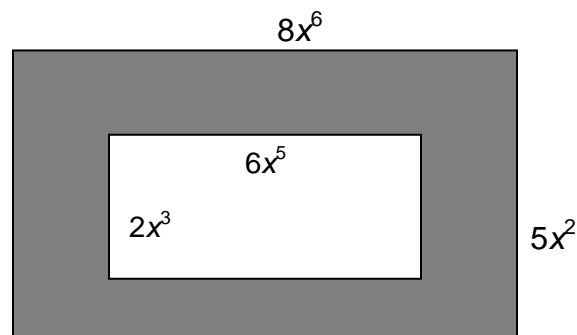
**PROBLEM-OF-THE-DAY: ALGEBRA 1****WEEK:** February 19 to February 22  
Wednesday**Day:**

**RISD Objective:** Given a problem which involves exponential operations, students will be able to apply exponent rules to simplify the expression.

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**PROBLEM #106**

**Find an algebraic expression to represent the shaded area.**



**MODEL SOLUTION #106**

$$A = lw$$

$$\begin{array}{ll} \text{Big rectangle area} = (8x^6)(5x^2) & \text{Small rectangle area} = (6x^5)(2x^3) \\ & = 40x^8 & = 12x^8 \end{array}$$

**Shaded area = Big rectangle – small rectangle**

$$\begin{array}{l} \text{Shaded area} = 40x^8 - 12x^8 \\ = 28x^8 \text{ units}^2 \end{array}$$