1.   Is $\dfrac{22}{7}$ rational? Justify your response.

2. Determine the value of the variable that satisfies the equation $8n - 3(4n + 2) = 7 + 5(n - 2)$, and use our rhymes to describe each step of your solution.

Simplify; use our rhymes to describe each step.

3. $\dfrac{(6n^2 d^3)^3}{36 n^5 d^7}$

Solve; use our rhymes to describe each step.

4. $x^2 = \dfrac{576}{324}$

$x =$

5. Joanna has a new box that is a cube, but only knows that the length of one side is $5ab^3$ units. What is the volume of Joanna's new storage box?

6. Jupiter has a diameter of $1.43 \bullet 10^5 \, km$, and Mars' diameter is $6.79 \bullet 10^3 \, km$. How many times larger is Jupiter's diameter to Mars' diameter?