

Practice 12.5b, 12.6

Name \_\_\_\_\_

(12.5b) Write the expression in standard form.

1)  $8.72 \times 10^6$

2)  $1.221 \times 10^{-5}$

Convert to scientific notation.

3) 570,000

4) 0.000281

(12.6) Divide.

7)  $\frac{a^6 - a}{a}$

8)  $\frac{x^5 - 14x}{2x^2}$

Perform the indicated operation. Write the answer in standard notation.

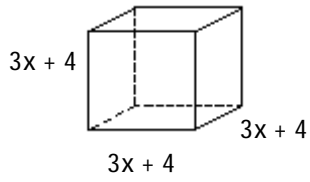
5)  $(8.6 \times 10^{-4})(7.4 \times 10^7)$

9)  $\frac{7x^2 - 3x + 1}{21x}$

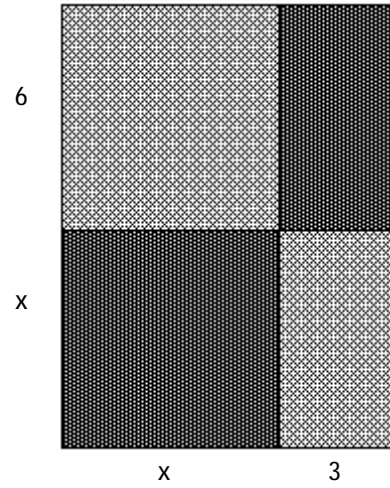
6)  $\frac{10 \times 10^{-7}}{2 \times 10^3}$

Solve the problem.

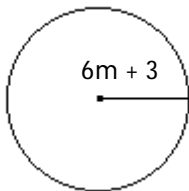
- 10) Find a polynomial that represents the volume of the cube.



- 12) Find the total area of the darker shaded rectangles.



- 11) Determine a polynomial that represents the area of the figure. Give an exact answer using the symbol  $\pi$ .



Answer Key

Testname: WKS\_12.5B\_12.6

1) 8,720,000

2) 0.00001221

3)  $5.7 \times 10^5 = 570000$

4)  $2.81 \times 10^{-4} = .00281$

5)  $6.364 \times 10^4 = 63640$

6)  $5 \times 10^{-10} = .0000000005$

7)  $a^5 - 1$

8)  $\frac{x^3}{2} - \frac{7}{x}$

9)  $\frac{x}{3} - \frac{1}{7} + \frac{1}{21x}$

10)  $27x^3 + 108x^2 + 144x + 64$

11)  $36\pi m^2 + 36\pi m + 9\pi$

12)  $x^2 + 18$  No middle  
term