

## Sample Lesson #1

1. Simplify.  $3\sqrt{4} \cdot 5\sqrt{5}$
2. 25% of 60 is what number?
3. Factor.  $k^2 - 81$
4.  $(-6)(2)(-3) = ?$
5. Solve using the quadratic formula.  $a^2 - 9a + 8 = 0$
6. Write the formula for finding the area of a triangle.
7. Multiply.  $(3x + 2)(2x + 3)$
8. Solve for  $x$ .  $\frac{2}{9} = \frac{x}{108}$
9.  $\frac{4}{5} \cdot \frac{10}{12} = ?$
10. Solve for  $a$ .  $5(a + 2) = 30$
11. Tonya bought a bracelet for \$550. If the sales tax was 7%, how much money did Tonya spend on the bracelet?
12. Write  $3.23 \times 10^4$  in standard notation.
13. Simplify.  $8x^{-3}y^2z^{-5}$
14. Which is greater,  $\frac{6}{25}$  or 25%?
15. How many centimeters are in 17 meters?
16. Put these integers in decreasing order.  $-73$     $-16$     $0$     $-3$     $-28$
17. Write the slope of a line that passes through points (1, 3) and (6, 8).
18. Factor.  $3x^3 + 9x^2 - 6x$
19. Simplify.  $7\sqrt{64a^{20}}$
20. Find the difference.
 
$$\begin{array}{r} 9x^2 - 3 \\ - 2x^2 + 1 \\ \hline \end{array}$$



1.	2.	3.	4.
5.	6.	7.	8.
9.	10.	11.	12.
13.	14.	15.	16.
17.	18.	19.	20.