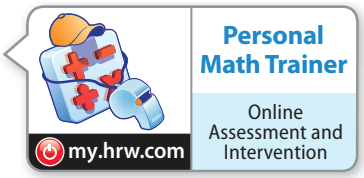
Are YOU Ready?

Complete these exercises to review skills you will need for this module.



Exponents

EXAMPLE $6^3 = 6 \times 6 \times 6$ — Multiply the base (6) by itself the number of times indicated by the exponent (3).

$= 36 \times 6$ — Find the product of the first two terms.

$= 216$ — Find the product of all the terms.

Evaluate each exponential expression.

1. 11^2 _____ **2.** 2^5 _____ **3.** $\left(\frac{1}{5}\right)^3$ _____ **4.** $(0.3)^2$ _____

5. 2.1^3 _____ **6.** 0.1^3 _____ **7.** $\left(\frac{9.6}{3}\right)^2$ _____ **8.** 100^3 _____

Round Decimals

EXAMPLE Round 43.2685 to the underlined place.

43.2685 → 43.27

The digit to be rounded: 6
The digit to its right is 8.
8 is *5 or greater,* so round *up.*
The rounded number is 43.27.

Round to the underlined place.

9. 2.3<u>7</u>4 _____ **10.** 12<u>6</u>.399 _____ **11.** 13.<u>9</u>577 _____ **12.** 42.6<u>9</u>0 _____

13. 134.<u>9</u>5 _____ **14.** 2.<u>0</u>486 _____ **15.** 63.6<u>3</u>52 _____ **16.** 98.<u>9</u>499 _____

Simplify Numerical Expressions

EXAMPLE $\frac{1}{3}(3.14)(4)^2(3) = \frac{1}{3}(3.14)(16)(3)$ — Simplify the exponent.

$= 50.24$ — Multiply from left to right.

Simplify each expression.

17. $3.14(5)^2(10)$ _____ **18.** $\frac{1}{3}(3.14)(3)^2(5)$ _____ **19.** $\frac{4}{3}(3.14)(3)^3$ _____

20. $\frac{4}{3}(3.14)(6)^3$ _____ **21.** $3.14(4)^2(9)$ _____ **22.** $\frac{1}{3}(3.14)(9)^2\left(\frac{2}{3}\right)$ _____