

Eighth Grade Math**MULTIPLICATION OF EXPONENTS: Example: $.20 \times 4^2 = .20 \times 16 = 3.2$**

1) $.10 \times 6^2 =$ 2) $.37 \times 12^2 =$ 3) $5.5 \times 10^2 =$

4) $15.3 \times 3^3 =$ 5) $.48 \times 2^5 =$ 6) $.91 \times 5^2 =$

ORDER OF OPERATIONS:

PEMDAS: Parentheses, Exponents, Multiplication and Division (from left to right), Addition and Subtraction (from left to right) **Example:** $-4 + 60 \div (-6) =$

$$-4 + (-10) = -14$$

7) $-5 + 16 \div (-4) =$ 8) $-25 - 10 + 8 =$

9) $9 + 60 \times 3 =$ 10) $7 + 32 \div (-2) =$

ABSOLUTE VALUE: Example: $|-55| = 55$

Hint: Whatever is inside the absolute value is always positive.

11) $|-8| =$ 12) $|-9| =$ 13) $|17| =$ 14) $|32| =$

Example: $|20| + |-8| = 20 + 8 = 28$ $|-6| - |3| = 6 - 3 = 3$

15) $|49| + |-8| =$ 16) $|72| - |12| =$ 17) $|-28| - |24| =$

MEASUREMENTS: Example: 6 feet x 12 inches/foot = 72 inches

Hint: One foot is equal to 12 inches

18) 12 feet = _____ inches 19) 40 feet = _____ inches

20) 24 feet = _____ inches 21) 108 feet = _____ inches

MULTIPLICATION OF EXPONENTS: Example: $y^5 * y^3 = y^8$

26) $b^4 * b^1 =$

27) $c^5 * c^5 =$

28) $z^3 * z^2 =$

29) $x^2 * x^4 =$

SCIENTIFIC NOTATION:**Convert to standard form**

30) $1.4 \times 10^5 =$

31) $3.06 \times 10^3 =$

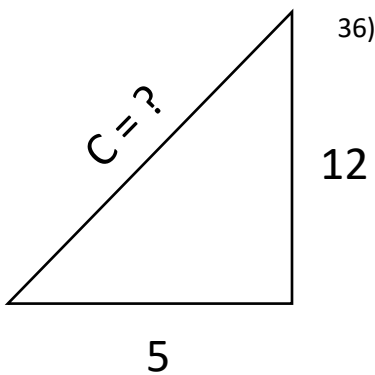
32) $6.72 \times 10^2 =$

Convert to scientific notation

33) $502000 =$

34) $4800 =$

35) $99000 =$

PYTHAGOREAN THEOREM:

Example:

$c = ?$

$20 = b$

$15 = a$

$$a^2 + b^2 = c^2$$

$$15^2 + 20^2 = c^2$$

$$225 + 400 = c^2$$

$$625 = c^2$$

$$\sqrt{625} = \sqrt{c^2}$$

$$25 = c$$
