

6th Pre-Algebra: Please clear your desk except for...
 Pencil, spiral notebook, homework
 Warm-up:

1. $3\frac{1}{3} - 1\frac{2}{5}$
 $\frac{20}{5} \cdot \frac{2}{2} - \frac{10}{5} \cdot \frac{2}{2}$
 $\frac{14}{5} \div \frac{2}{2}$
 $\frac{29}{15} \cdot \frac{1}{2}$
 $\frac{29}{30}$

2. $4\frac{3}{5}$
 $1\frac{1}{2}$
 $\frac{23}{5} \div \frac{3}{2}$
 $\frac{23}{5} \cdot \frac{2}{3}$
 $\frac{46}{15}$
 $3\frac{1}{3}$

Aug 3-3:01 PM

How are expressions evaluated and simplified?

Evaluate \Rightarrow Perform all of the operations!
 Simplify

Equation	vs	Expression
equal signs		no equal signs
Solve		Evaluated
* unknown		Simplified
		# variables, Operations

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How do we read it? (3)
 How do we evaluate it? 2^2 2 squared

base $2 \cdot 2 \cdot 2$ base: what exponent \Rightarrow how many to x .

Evaluate each expression. Show all steps.

Ex 1: 3^3
 $3 \cdot 3 \cdot 3$
 27

Ex 2: 4^4
 $4 \cdot 4 \cdot 4 \cdot 4$
 256

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Ex 3: 11^2
 $11 \cdot 11$
 121

Ex 4: 10^4
 $10 \cdot 10 \cdot 10 \cdot 10$
 $10,000$

Ex 5: 5^3
 $5 \cdot 5 \cdot 5$
 125

Ex 6: $(\frac{1}{2})^2$
 $\frac{1}{2} \cdot \frac{1}{2}$
 $\frac{1}{4}$

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How are multiplication and division written in expressions?

Multiplication	Division
•	÷
x	—
()	/
*	√
b^2 ← Exponent	
3[2]	
3c	
! Factorial	
5! → 5 · 4 · 3 · 2 · 1	

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What are the order of operations?

☆ GEMDAS

1. Perform all operations within grouping symbols.
2. Evaluate exponents.
3. Multiply or divide from left to right.
4. Add or subtract from left to right.

What are the Grouping Symbols?

() [] { } $\frac{(\quad)}{(\quad)}$

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Evaluate each expression. Show all steps and circle our final answer.

1. $50 - 25 + 5(3)$ $50 - 25 + 15$ $25 + 15$ 40	2. $2^3 \cdot 5^2$ $2 \cdot 2 \cdot 2$ $8 \cdot 25$ 200
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Evaluate each expression. Show all steps and circle our final answer.

3. $120 - 24 \div 4 \times 3 - 1$ $120 - 6 \times 3 - 1$ $120 - 18 - 1$ $102 - 1$ 101	4. $3(18 - 7(2))^2$ $3(18 - 14)^2$ $3(4)^2$ $3(16)$ 48
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Evaluate each expression. Show all steps and circle our final answer.

$$5. \frac{8(6) - 4(2.5)}{[3(2)]^2}$$

$$\frac{48 - 10}{6^2}$$

$$\frac{38}{36}$$

$$\boxed{\frac{19}{18}}$$

$$6. 36 - 2(4+9) + 2.5$$

$$36 - 2(13) + 2.5$$

$$36 - 26 + 2.5$$

$$10 + 2.5$$

$$\boxed{12.5}$$

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Evaluate each expression. Show all steps and circle our final answer. Substitute the values in before you evaluate. Show all steps.

$$7. 2x - y^3 \text{ when } x=15, y=3$$

$$2(15) - (3)^3$$

$$30 - 27$$

$$\boxed{3}$$

$$8. \frac{m(n^2 - mn)}{(m+n)^2} \text{ when } m=2, n=3$$

$$\frac{2(3^2 - 2(3))}{(2+3)^2}$$

$$\frac{2(9-6)}{5^2}$$

$$\frac{2(3)}{25}$$

$$\frac{6}{25}$$

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① Erase wrong work.
 ② Re-do
 ③ Signed

ixl * for help
 Teacher page 80% 90%

Sep 15-10:57 AM

Extra practice:

Evaluate when $x = \frac{2}{3}, y = 2\frac{1}{2}, a = 4.8, b = 2.25$

1. $x^2 + y$

2. $y^2 - 2x$

3. $6 + a(3+a)$

4. $\frac{x+y}{x}$

Aug 3-10:32 PM

6th Pre-Algebra: Please clear your desk except for...

1. Pencil and spiral notebook
2. HW: Order of Operations #1

*Complete the warm-up quiz #1 and turn in to me

*Turn to page 21 in the textbook and complete #1-6, and 8-13. You must copy the original problems and show all steps.

Extra practice:

1. $3\frac{1}{3}\left(1\frac{4}{5}\right) + \left(1\frac{1}{2}\right)^2$

2. $2.5(7) - 1.2^2$

3. $\frac{16 - (5.65 + 2.8)}{8 - 2(1.5)}$

4. $\frac{2}{3} \times \frac{2}{5} \div 1\frac{2}{3}$

Aug 3-10:08 PM

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