

**Math 001: Pre-algebra online practice quiz.**

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1. State the order in which you should apply arithmetic operations under the *order of operations agreement*.
2. Compute:  $10 - 3 + 7$
3. Compute:  $12 + 6 \div 3$
4. Compute:  $48 \div 6 \times 8$
5. Compute:  $28 + 2(12 - 3^2)$
6. Several words and phrases are used to express arithmetic operations. Do the following refer to addition, subtraction, multiplication or division?  
a) 'product' b) 'sum'
7. What is meant by the commutative property of arithmetic?
8. Evaluate: (a)  $-6 + (-8)$  (b)  $4 - (-8)$  (c)  $-7 + 9$  (d)  $-8 - 9$
9. Evaluate: (a)  $-6 \cdot (-8)$  (b)  $4 \cdot (-8)$  (c)  $\frac{-48}{6}$  (d)  $(-8)^2$
10. Compute:  $12 + 6 \div (-3)$
11. Compute:  $(-2) - 8(24 - 5^2)$
12. a) What is meant by the *absolute value* of a number?  
b) Which two numbers have an absolute value of 4?
13. Positive or negative? (a)  $(-3)^7$  (b)  $(-2)^4$  (c)  $-2^2$  (d)  $-x$  (*careful! x can be any number*)
14. What is meant by:  
a) an equivalent fraction  
b) the denominator of a fraction?
15. State *three* fractions that are equivalent to  $\frac{2}{5}$

16. Reduce to lowest terms:

a)  $\frac{12}{36}$

b)  $\frac{15}{35}$

17. Calculate the following. Reduce to lowest terms.

a)  $\frac{2}{5} + \frac{1}{4}$

b)  $6\frac{2}{3} - 5\frac{3}{5}$

18. Calculate the following. Reduce to lowest terms.

a)  $\frac{1}{2} \cdot \frac{2}{3}$

b)  $2\frac{2}{3} \cdot 4\frac{3}{4}$

19. Simplify  $\frac{2}{5} + \frac{1}{4} - \frac{11}{20}$