

MAT 050 Practice Test Chapters 1 and 2

All test answers are to be in simplest form. A calculator may be used.

Cell phones, iPads, and other electronic devices with scanning or photo ability may NOT be used.

No notes, no books, no homework may be used while taking this test.

The test will include several fill in the blank questions covering vocabulary from the list below.

inequality symbols	exponent	term	numerical coefficient
grouping symbols	solution	like terms	unlike terms
equation	absolute value	numerator	denominator
opposite	base	reciprocals	variable

Use exponential notation to write the repeated multiplication.

1) $3 \cdot 3 \cdot 3 \cdot 3$

2) $8 \cdot 8 \cdot 2 \cdot 2 \cdot 2 \cdot 2$

Compute the square root.

3) $\sqrt{100}$

4) $\sqrt{484}$

5) $\sqrt{441}$

Evaluate each expression.

6) $5 \cdot 15 + 7 \cdot 10$

7) $5 \cdot 10^2$

8) $9 - 6(-9)$

9) $0 \div 2 + 3 \cdot 8$

10) $-5(6 - 3) - 4^2$

11) $(\sqrt{7 - 3} + 4)^2$

12) $\frac{38(9 - 6) - 12}{3^2 - 3}$

Evaluate each expression.

13) $-5 + 8 - (-12) + 8$

14) $\frac{6(-3) - 2 + 10}{-50 \div 5}$

15) $|7 - 18| \cdot (-24) \div (-4)$

Identify the following as an equation or an expression.

16) $x + 12x - 9$ _____

17) $m = 17 - 4m$ _____

18) $16 + 9(x - 8)$ _____

Evaluate the expression for the given variables.

19) $x - y + z$ for $x = 23, y = 9, z = 3$

20) $x + y$ for $x = 3, y = -6$

21) $\frac{2^2 + 6(d)}{3 + (c)}$ for $c = -16, d = -5$

22) $-8 + m \div (n)$ for $m = 0, n = -6$

23) $n \cdot (m - 12)^2$ for $m = 7, n = 7$

Determine if the given number is a solution to the given equation. Show work to validate your answer of yes or no.

24) Is 15 a solution to $p + 3 = 18$?

- 25) Is 14 a solution to $p - 11 = 3$?
- 26) Is -10 a solution to $y - 3 = -13$?
- 27) Is 10 a solution to $2(x - 5) = 11$?
- 28) Is 30 a solution to $3n = 87$?
- 29) Is 3 a solution to $84 \div x = 29$?
- 30) Is 4 a solution to $y^3 = 12$?
- 31) Is -3 a solution to
 $-18 + 45 \div (y) = 33$?

Solve the following equations.

- 32) $b + 9 = 18$ $b =$ _____
- 33) $29 = 3 + z$ $z =$ _____
- 34) $x - 5 = 14$ $x =$ _____
- 35) $-26 = n - 2$ $n =$ _____
- 36) $7 = a - (-13)$ $a =$ _____
- 37) $n^3 = 216$ $n =$ _____
- 38) $40 \div w = -5$ $w =$ _____

Solve the problem.

- 39) Find the average of the list.
 $-15^\circ, 3^\circ, -8^\circ, 7^\circ, -9^\circ, 2^\circ,$ and -1°F