Name_____

Print your name clearly if you want credit for this exam.

ID_____

MATH 1010 EXAM 1

- Use a PENCIL, erase errors.
- **SHOW ALL WORK**. No points will be given for answers without justification.
- Circle your answer so it is easy to locate.
- NO CALCULATORS, NOTES, PHONES, ETC.
- Answers should be simplified (reduced.)
- Failure to show work for a problem will result in zero (0) points.
- There are 10 questions worth10 points each.
- Finish in an hour. Penalties for going over time.

The entire exam is worth 100 points. Be sure to attempt all parts of each question, showing all work.

Your score:

Page 1 _____/40

Page 2 _____/30

Page 3 _____/30

Total: _____/100

USE PENCIL, SHOW WORK, ERASE ERRORS

NO CALCULATORS, CELL PHONES, ETC.

1. Write the value of each expression and Place each on the number line if possible.

A = 2^3+3-14+5 = B = $(-\frac{7}{2})(\frac{2}{5})$ =

C = $(3-8)^0$ = D = $(3+6) \div (2-2)$ =

E = -2^4 = F = 3(4) −2(6)=

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2 . a. Solve for x: 8x-2(x-4) = 4x + 14

b. Check your solution

3. Evaluate each expression for

x = -2 and y = 3

a. $xy^2 - x^3$

b. $x + 2y - \frac{3x}{y}$

4 . Write a proportion and solve for x.

If a 5-foot tree casts an 8-ft shadow, what size tree casts a 32-ft shadow?

a) Proportion:

b) solution (include units)

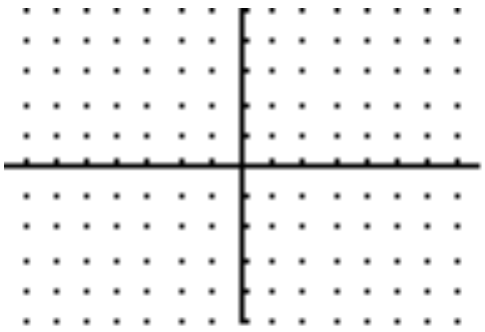
5. Given these points A (3,-2) and B(1,4)

a) Find the exact distance between them.

b) The answer is between which two integers?

c) Determine the midpoint (M) of the segment AB.

d) On this grid, plot the points and the midpoint. Label them.



6. . Solve and graph the solution $|2x+3| \leq 5$

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7. Simplify this expression and put the answer in standard order.

$2(x-3)-5(x^2+2)+3x^3-6x^2$

Evaluate the expression for x = -1

8. Write the slope of each of these lines:

a) One containing (-5,4) and (-5,3)

b) 3x-2y=5

c) A horizontal line

d) $y = -\frac{2}{3}x + 3$

9. Show work on these percent problems.

a) What percent of 72 is 18?

b) 35 is 5% of what?

10. Given this equation, plot the x-intercept and the y-intercept and two other points.

y = 2 – 3x

a) x-intercept (State as ordered pair.)

b) y-intercept (State as ordered pair.)

c) Other points (State as ordered pairs.)

d) Graph points and draw the equation.