

MATHEMATICS 89

FINAL EXAM

Spring 2009 VERSION Best Time to do Each Thing

STUDENT NAME:

INSTRUCTOR NAME:

SECTION:

- This exam has 25 questions. Each question is worth 4 points.
- Show sufficient work to support your answers. If you do not show your work when indicated, you may lose points, **EVEN IF YOU HAVE THE CORRECT FINAL ANSWER.**
- This is a closed book exam. No notes, no books allowed.
- No calculators allowed.
- Unless otherwise stated, simplify all answers as much as possible.
- Write your name at the top of each page.
- Show your work in the space indicated. If you do not have enough room to work on a particular problem, you can use the back of the previous page or an extra sheet of paper. Make sure that the graders can find any work that you want graded. Write your name and student number on any extra paper.

Question	1	2	3	4	5	6	7	8	9	10	11	12	13
Score													

Question	14	15	16	17	18	19	20	21	22	23	24	25	TOTAL
Score													

NAME: _____

1. Solve $10h - 9 = 6h + 7$.

Answer: _____

SHOW WORK HERE:

2. The sum of three consecutive odd integers is 81. What are the three integers?

Answer: _____

SHOW WORK HERE:

3. A store has six racks of shirts as well as twenty-five more shirts in a bin. Each rack contains the same number of shirts. Altogether, the store has 145 shirts. How many shirts are on each rack?

Answer: _____

SHOW WORK HERE:

4. When the unequal side of an isosceles triangle is increased by 3 inches, the triangle becomes an equilateral triangle. If the perimeter of the isosceles triangle was initially 18 inches, how long was each side of the original triangle?

Answer: _____

SHOW WORK HERE:

NAME: _____

5. Circle all of the true statements below.

$$5 = \frac{24}{4} \qquad 6 \neq 8$$

$$2 = 2 \qquad 5 > 5 \qquad -3 < -6$$

6. Find $|-19.27|$.

Answer: _____

SHOW WORK HERE:

7. Rewrite $6 \cdot 6 \cdot 6 \cdot 6 \cdot 6 \cdot 6 \cdot 6$ using exponents.

Answer: _____

SHOW WORK HERE:

8. Write $\frac{36}{108}$ in lowest terms.

Answer: _____

SHOW WORK HERE:

9. Find $\frac{5}{14} \cdot \frac{21}{5}$.

Answer: _____

SHOW WORK HERE:

NAME: _____

10. Find $\frac{6}{49} \div \frac{9}{7}$.

Answer: _____

SHOW WORK HERE:

11. Find $\frac{3}{8} + \frac{3}{10}$.

Answer: _____

SHOW WORK HERE:

12. Find $-29 + 81$.

Answer: _____

SHOW WORK HERE:

13. Find $-78 \div (-13)$.

Answer: _____

SHOW WORK HERE:

14. Find $7 \cdot (3 - 5)^2 + 6$.

Answer: _____

SHOW WORK HERE:

NAME: _____

15. What are the coefficients in the expression $3x^3y - 8x^2y^2 + 5$?

Answer: _____

SHOW WORK HERE:

16. Simplify $-4x - 15 + 7x - 12$.

Answer: _____

SHOW WORK HERE:

17. Evaluate $8m + n - 12$ when $m = 5$ and $n = -1$.

Answer: _____

SHOW WORK HERE:

18. Solve $a + 7 = 22$.

Answer: _____

SHOW WORK HERE:

19. Solve $\frac{2}{3}(c + 8) = 6$.

Answer: _____

SHOW WORK HERE:

NAME: _____

20. Solve $12 \leq 8 - 3x \leq 23$. (You do NOT need to graph the solution.)

Answer: _____

SHOW WORK HERE:

21. Fill in the blank: A(n) _____ triangle is a triangle with exactly two sides of equal length.

22. Below, draw a number line and graph the inequality $-7 < x \leq -4$.

23. Solve $x + 5 > 11$. (You do NOT need to graph the solution.)

Answer: _____

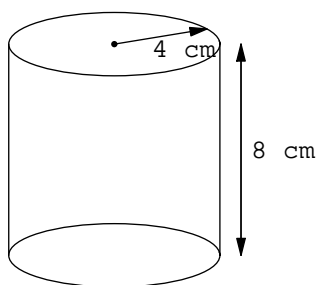
SHOW WORK HERE:

NAME: _____

24. What is the volume of the cylinder below? (Do not approximate π – leave π in your answers.)

Answer : _____

SHOW WORK HERE:



25. If the area of the trapezoid below is 6 cm^2 , what is its height?

Answer : _____

