NAME: _____ DATE: _____ Math 9
Mrs. van der Vossen

PRACTICE FINAL EXAM Part 1

Multiple Choice (1 mark each)

1. Which rational number is between -1.15 and -1.10 on a number line?
   a. $-\frac{121}{100}$
   b. $-\frac{212}{200}$
   c. $-\frac{28}{25}$
   d. $-\frac{108}{100}$

2. Which rational number is an example of a perfect square?
   a. 215
   b. 0.006
   c. $\frac{1}{9}$
   d. $\frac{9}{20}$

3. What is the value 8 in the expression $4(8)^7$ called?
   a. Exponent
   b. Base
   c. Power
   d. Coefficient

4. What is the power in the expression: $4 - 2(-9)^5$?
   a. -2
   b. -9
   c. 5
   d. None of the above

5. What expression is represented by $[(-2)^3]^4$?
   a. $(-2)(-2)(-2) \times (-2)(-2)(-2)(-2)$
   b. $-(2)(2)(2) \times (2)(2)(2)(2)$
   c. $(-2)(-2)(-2) \times (-2)(-2)(-2) \times (-2)(-2)(-2) \times (-2)(-2)(-2)$
   d. $-(2)(2)(2) \times (2)(2)(2) \times (2)(2)(2) \times (2)(2)(2)$

6. What expression is equivalent to $[(-10) \times 2]^2$?
   a. $-10^2 + 4$
   b. -200
   c. $(-100) \times 4$
   d. 400

7. Evaluate: $[1-(-3)]^{5-3} \div 2$
   a. -8
   b. 8
   c. -16
   d. 16

8. What is the quotient of 5^{16} and 5^{12}?
   a. 150
   b. 25^2
   c. 5^5
   d. 5^3

9. What is the product of $\left(\frac{1}{5}\right)^2$ and $\left(\frac{1}{5}\right)^3$?
   a. $\left(\frac{1}{5}\right)^1$
   b. $\left(\frac{1}{5}\right)^6$
   c. $\frac{1}{225}$
   d. $\frac{1}{3125}$

11. Which polynomial does not have a constant?
   a. $3x-2+4y$
   b. $2f^2$
   c. $-m+mn-3$
   d. $6+3x+x^2$

12. Which of the following expressions is a binomial?
   a. $2w+3x-4y$
   b. $4rs^2$
   c. $8a-3b$
   d. $-2z^2-2z+2$

13. Which of the following is the simplified version of the expression :
$(-p+4)+(3p-2)$
   a. $-3p-2$
   b. $2p-2$
   c. $-2p+2$
   d. $2p+2$

14. Which expression is the opposite of x^2+4x-7?
   a. $7-4x+x^2$
   b. $-7+4x+x^2$
   c. $-x^2-4x+7$
   d. $-x^2+4x-7$

15. Which is the simplified version of the expression $-(-p)(4p)$?

a. $-1p + 4p$
b. $4p^2$
c. $-1p - 4p$
d. $-4p^2$

16. Which is equivalent to $\left(\frac{-1}{4}y\right)(12y - 4)$?

a. $-3y^2 - 4y$
b. $-3y^2 - y$
c. $3y + y$
d. $-3y^2 + y$

17. What is the Lowest Common Multiple used to eliminate the denominators in the following equation? $\frac{x}{12} + \frac{2}{3} = \frac{5}{6} + 8$

a. 3
b. 6
c. 8
d. 12
e. 24

18. Solve: $-4 = \frac{-m}{5}$

a. 20
b. 9
c. -20
d. -9

19. Solve: $\frac{40}{x} = 0.2$

a. 0.8
b. 200
c. 0.2
d. 20

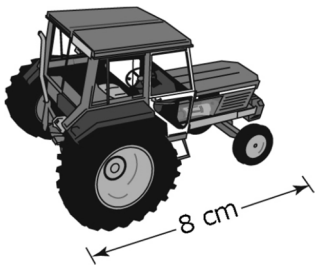
20. Solve: $10 = 3x - 2$

a. -4
b. 3
c. -3
d. 4

21. Solve: $\frac{x}{2} = \frac{x-4}{3}$

a. -12
b. -8
c. -2
d. 8

22. A local farm equipment dealership has model tractors. The lengths of the actual tractor is $16m$. How would you set up to solve for the scale factor was used for the reduction?



a. $\frac{1}{x} = \frac{16}{0.08}$
b. $\frac{1}{x} = \frac{16}{8}$
c. $\frac{1}{x} = \frac{8}{16}$
d. $\frac{1}{x} = \frac{0.08}{16}$

23. What is the value of x if $\frac{1}{x} = \frac{12}{48}$

a. 4
b. 3
c. 2
d. 1

24. $\Delta RQS \sim \Delta XYZ$, find the missing side length $\boldsymbol{QR}$.

a. 6.9
b. 6.5
c. 5.5
d. *none of the above*