Math 7 HONORS Name_____

Final Exam - (Part I)

Date_____ Period____

Evaluate each expression.

1) $4\frac{1}{3} + \frac{3}{2}$

2) $1\frac{6}{7} - \frac{3}{5}$

3) $1 - \frac{1}{5}$

4) $3\frac{2}{3} + \frac{2}{7}$

Write each as an algebraic expression.

5) x more than 2

6) 7 less than x is equal to 22

Simplify each expression.

7) $b - 2 - 4b + 5$

8) $-4v + v$

9) $7(1 + n)$

10) $-5(1 - x)$

11) $-2(1 + 7n) - 1$

12) $-2p - 10(-7p - 10)$

Evaluate each using the values given.

13) $(h - j)^2$; use $h = 4$, and $j = 1$

14) $(j)(j + h)$; use $h = 3$, and $j = 3$

15) $n + m - m$; use $m = 3.2$, and $n = 2.6$

16) $x + x + y$; use $x = 5.1$, and $y = 4.3$

Simplify. Your answer should contain only positive exponents.

17) $x^3 \cdot 2x^3$

18) $8k \cdot 2k^2$

19) $\frac{4v^3}{2v}$

20) $\frac{6p}{8p^2}$

Write each number in scientific notation.

21) 608000

22) 0.0002

Solve each equation.

23) $4 + 4n = -76$

24) $13 = 8 + \frac{x}{3}$

25) $-9 + \frac{r}{12} = -12$

26) $\frac{8 + r}{3} = -7$

Write each as a decimal. Use repeating decimals when necessary.

27) $6\frac{5}{8}$

28) $9\frac{2}{3}$

Write each as a percent. Use repeating decimals when necessary.

29) $\frac{9}{20}$

30) $9\frac{3}{8}$

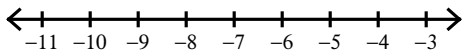
Write each as a fraction.

31) 0.07

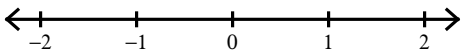
32) 5.6

Solve each inequality and graph its solution.

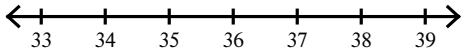
33) $\frac{3+n}{2} > -2$



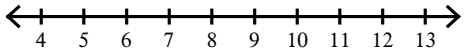
34) $-4 < -4 + \frac{k}{1}$



35) $-16 + \frac{v}{3} \leq -4$



36) $\frac{n-20}{6} > -2$



Solve each problem.

37) 28 is what percent of 104?

38) What is 60% of 97?

Find each percent change. Round to the nearest percent. State if it is an increase or decrease.

39) From 33 to 54

40) From 86 to 43

Find the selling price of each item.

41) Original price of a kitten: $85.00
Discount: 30%

42) Original price of a tie: $22.50
Discount: 20%

43) Original price of a wagon: $185.00
Tax: 3%

44) Original price of a comb: $1.50
Tax: 5%

Use simple interest to find the ending balance.

45) $205 at 14% for 3 years

46) $1,740 at 7% for 6 years

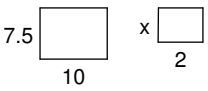
Solve each proportion.

47) $\frac{8}{12} = \frac{10}{m}$

48) $\frac{n}{2} = \frac{7}{3}$

Each pair of figures is similar. Find the missing side.

49)



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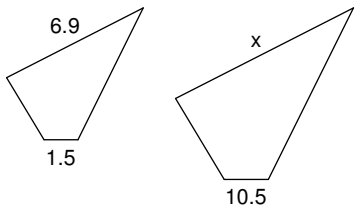


Math 7 HONORS Name_____

Final Exam - (Part I)

Date_____ Period____

Evaluate each expression.

1) $4\frac{1}{3} + \frac{3}{2}$ $5\frac{5}{6}$

2) $1\frac{6}{7} - \frac{3}{5}$ $1\frac{9}{35}$

3) $1 - \frac{1}{5}$ $\frac{4}{5}$

4) $3\frac{2}{3} + \frac{2}{7}$ $3\frac{20}{21}$

Write each as an algebraic expression.

5) x more than 2 $2 + x$

6) 7 less than x is equal to 22 $x - 7 = 22$

Simplify each expression.

7) $b - 2 - 4b + 5$ $-3b + 3$

8) $-4v + v$ $-3v$

9) $7(1 + n)$ $7 + 7n$

10) $-5(1 - x)$ $-5 + 5x$

11) $-2(1 + 7n) - 1$ $-3 - 14n$

12) $-2p - 10(-7p - 10)$ $68p + 100$

Evaluate each using the values given.

13) $(h - j)^2$; use $h = 4$, and $j = 1$ 9

14) $(j)(j + h)$; use $h = 3$, and $j = 3$ 18

15) $n + m - m$; use $m = 3.2$, and $n = 2.6$ 2.6

16) $x + x + y$; use $x = 5.1$, and $y = 4.3$ 14.5

Simplify. Your answer should contain only positive exponents.

17) $x^3 \cdot 2x^3$ $2x^6$

18) $8k \cdot 2k^2$ $16k^3$

19) $\frac{4v^3}{2v}$ $2v^2$

20) $\frac{6p}{8p^2}$ $\frac{3}{4p}$

Write each number in scientific notation.

21) 608000 6.08×10^5

22) 0.0002 2×10^{-4}

Solve each equation.

23) $4 + 4n = -76$ $\{-20\}$

24) $13 = 8 + \frac{x}{3}$ $\{15\}$

25) $-9 + \frac{r}{12} = -12$ $\{-36\}$

26) $\frac{8 + r}{3} = -7$ $\{-29\}$

Write each as a decimal. Use repeating decimals when necessary.

27) $6\frac{5}{8}$ 6.625

28) $9\frac{2}{3}$ $9.\overline{6}$

Write each as a percent. Use repeating decimals when necessary.

29) $\frac{9}{20}$ 45%

30) $9\frac{3}{8}$ 937.5%

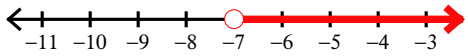
Write each as a fraction.

31) 0.07 $\frac{7}{100}$

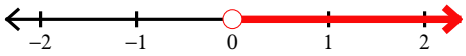
32) 5.6 $5\frac{3}{5}$

Solve each inequality and graph its solution.

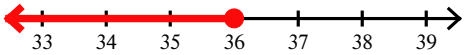
33) $\frac{3+n}{2} > -2$



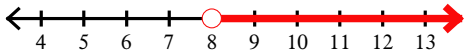
34) $-4 < -4 + \frac{k}{1}$



35) $-16 + \frac{v}{3} \le -4$



36) $\frac{n-20}{6} > -2$



Solve each problem.

37) 28 is what percent of 104? 26.9%

38) What is 60% of 97? 58.2

Find each percent change. Round to the nearest percent. State if it is an increase or decrease.

39) From 33 to 54 64% increase

40) From 86 to 43 50% decrease

Find the selling price of each item.

41) Original price of a kitten: $85.00 $59.50
Discount: 30%

42) Original price of a tie: $22.50 $18.00
Discount: 20%

43) Original price of a wagon: $185.00 $190.55
Tax: 3%

44) Original price of a comb: $1.50 $1.58
Tax: 5%

Use simple interest to find the ending balance.

45) $205 at 14% for 3 years $291.10

46) $1,740 at 7% for 6 years $2,470.80

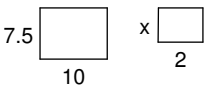
Solve each proportion.

47) $\frac{8}{12} = \frac{10}{m}$ {15}

48) $\frac{n}{2} = \frac{7}{3}$ {4.66}

Each pair of figures is similar. Find the missing side.

49) 1.5



50) 48.3