

Math 96 HW #1 Basic Math Review Name: _____

Show your work on this paper to receive credit.

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|---|---|---|
| 1.) Simplify: $3^2 + 3(5 \cdot 4 \div 2 \cdot 5)$ | 2.) Simplify: $14 + 3 \cdot 2(9 - 4)^2$ | 3.) Round: 5,398,274 a.) To the hundreds b.) To the ten-thousands |
| 4.) Give the prime factorization of 210. | 5.) Add: $1\frac{2}{5} + 3\frac{1}{2}$ | |
| 6.) Subtract: $6\frac{1}{3} - 2\frac{3}{4}$ | 7.) Multiply: $5 \cdot \frac{4}{9} \cdot 2\frac{1}{2}$ | 8.) Divide: $\frac{4}{5} \div 7$ |
| 9.) Simplify: $\frac{1}{3} + \left(\frac{1}{2}\right)^2 \cdot \frac{3}{5}$ | 10.) Simplify: $\frac{2}{3} \div \left(\frac{1}{9} + \frac{1}{5}\right)$ | 11.) Subtract: $18 - 12.735$ |

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| <p>12.) Multiply: 0.65×0.3</p> | <p>13.) Divide: Round to the hundredths: $\frac{19.75}{5.3}$</p> | <p>14.) Simplify: $27 - (0.1 + 0.8) \div 0.6$</p> |
| <p>15.) Arrange from greatest to smallest: $.5$ $\frac{2}{3}$ $.49$ $\frac{3}{5}$ $.61$</p> | <p>16.) Convert to a fraction: 4.72</p> | <p>17.) Convert to a decimal: $\frac{11}{13}$</p> |
| <p>18.) Convert to a percentage: $.79$</p> | <p>19.) Convert to a percentage: $\frac{3}{8}$</p> | <p>20.) Convert to a decimal: 25.2%</p> |
| <p>21.) Convert to a fraction: 11.4%</p> | <p>22.) Is this a true proportion? $\frac{1}{3} = \frac{4}{5}$</p> | <p>23.) Solve: What percent of 18 is 45?</p> |

24.) Solve: 20% of a number is 18.5.

25.) Solve for x:

$$\frac{x}{125} = \frac{12}{33}$$

26.) Solve for x:

$$\frac{14}{25} = \frac{x}{18}$$

27.) Solve:

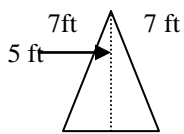
If a 5 ft woman casts a 7 ft. shadow, how long would the shadow of a 25 ft. tree be?

28.) Solve:

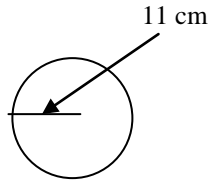
What was the original price of a jacket that costs \$76 when discounted by 25%?

29.) What is the mean of 27, 39, 21, 47 and 40?

30.) Give the perimeter and area:



31.) Give the circumference and area.



32.) Give the perimeter and area.

