Review for Test #3 over Ch 4 and Sect 9.4

Work all the problems on a separate piece of paper showing all steps.

Change the following into a fraction or a mixed number (show all steps):

1a) 0.35

1b) 2.888

Convert into a decimal (show all steps & round to the nearest thousandth if needed):

2a) $17\frac{9}{16}$

2b) $56\frac{3}{17}$

Write the following in words:

3a) 3.057

3b) 190.0045

Compare the following using < or >:

4a) 2.4888 _____ 2.49

4b) $6\frac{7}{8}$ _____ 6.879

Round each number to the indicated place values:

	Number	Thousandth	Hundredth	Tenth
5)	**6.8921**			
6)	**7.4293**			
7)	**8.9978**			

8) Round \$7.4967 a) to the nearest cent and b) to the nearest dollar.

9) Round \$12.79099 a) to the nearest cent and b) to the nearest dollar.

Perform the indicted operation (show all steps & round to the nearest thousandth if needed):

10) The total of 7.89, 169, 143.985, 100.0003, 2.1, and 3

11) The difference between 2332 and 556.987

12) Subtract 4.796 from 17.09

13) The product of 56.7 and 0.09.

14) (7.435) (0.35)

15) 5 divided into 3.14

16) 0.456 divided by 0.04

17) The quotient of 6724 and 994.

Simplify the following:

18) $3\{3.2\}^2 - 7.5(4.5 - 4.4)^2 + 5$

19) $(9 - 6.75)^2 + (2.3 + 4.1[5.6])$

20) $10^2 \div 8 - 17.36 \bullet 0.003$

21) $12.6 \bullet 9.1 \div 3.9 \bullet 4.8$

22) $\frac{3}{5} - 0.4 \div 1.6\{\frac{11}{8} - 0.075\}^2$

23) $0.7 \bullet (9 - \frac{6}{7})^2 + 1.5 - \frac{7}{10}$

Solve the following:

24) The Vet charges $35.95 for an office visit plus $24.90 per hour. If Coyote is seen by the Vet for 3.5 hours, what is his total vet bill?

25) Tweety-Bird is buying Gold Bird Cage. He can finance $75,000 of the cost with either a 15-year or 30-year mortgage at 7.25% interest. The monthly payments for the 30-year mortgage are $511.63 while the monthly payments for the 15-year mortgage are $684.52. How much will he save with the 15-year mortgage?

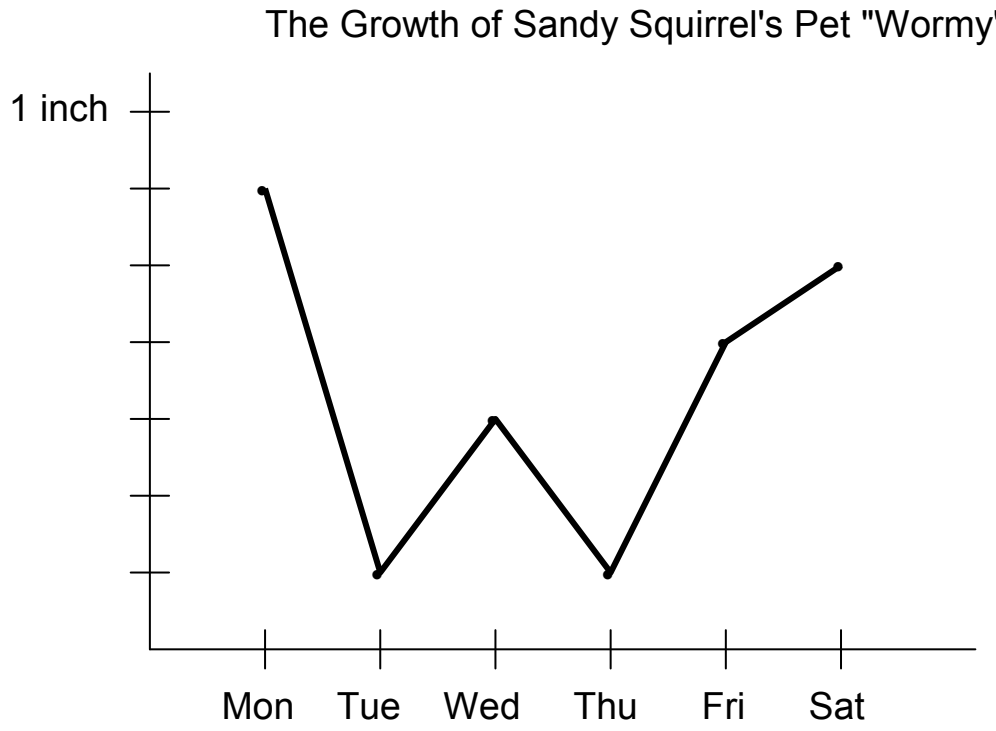
26) If a carrot costs $0.70 each, how many whole carrots can Bugs Bunny buy with $43.60?

27) Sandy Squirrel bought seven Krabby Patties for $1.14 each, five shakes for 96¢ each, and six bags of fries for 79¢ each. If she gave Squidword a $20 bill and sales tax was $1.38, how much did she get in change?

28) While in the hospital, Mrs. Puff knitted a total of five sweaters. If she used 4.8 yards of yarn for each sweater and knitted 3 yards of yarn on average per day, how many days was she in the hospital?

29) Find the mean, median and mode of 4.5, 8.9, 3.2, 8.9, 7.3, & 1.1.

Use the graph below to answer the following:



30) Find mean, median, and mode of the growth per day of Wormy.

Without working the problem, use critical thinking to determine which answers are unreasonable:

31) Convert $\frac{\#}{1\#}$ into a decimal.

a) 0.596 b) 7.12 c) 12.7d) 1.714 e) 0.621

32) The mean of 6.#, 2.#, 8.#, 6.#, and 8.#.

a) 5.32 b) 6.54 c) 1.9 d) 9.8 e) 33.2

33) $0.3\#\overline{)6.\#\#\#\#}$

a) ≈ 0.2053 b) ≈ 2053 c) ≈ 2.053 d) ≈ 20.53 e) ≈ 205.3

34) 18.##•61.##

a) 1168.529 b) 116.8529 c) 11.68529 d) 11685.29 e) 0.1168529

Without working the problem, use critical thinking to determine which answers are unreasonable:

35) $36.\#\# + 45\frac{1}{3} + 0.\#\# + 8.\#\# + 63$

a) $90\frac{41}{43}$ b) $91\frac{1}{30}$ c) $153\frac{41}{43}$ d) $108\frac{1}{3}$ e) $154\frac{1}{30}$

In the problem below, the student has made an error. Use critical thinking to find and correct the error. Then finish working the problem.

36) Convert $2\frac{2}{3}$ to a decimal.

Solution:

$2\frac{2}{3} = \frac{2 \bullet 3 + 2}{3} = \frac{8}{3}$

$$
\begin{array}{r}
0.375 \\
8\overline{)3.0} \\
-\ 24 \\
\hline
60 \\
-\ 56 \\
\hline
40 \\
-\ 40 \\
\hline
0
\end{array}
$$

The answer is 0.375.

37) Convert 4.065 into a fraction.

Solution:

$4.065 = 4\frac{65}{100} = 4\frac{13}{20}$

38) Juan's cell phone company charges him \$39.95 per month plus 69¢ per minute for each minute over what his plan allows. If he used 65 minutes over what his plan allows last month, what was his phone charges?

Solution:

$39.95 + 69 = 108.95$

$$
\begin{array}{r}
108.95 \\
\times \quad 65 \\
\hline
\$7081.75
\end{array}
$$

39) $7 - 0.3278$

Solution:

$$
\begin{array}{r}
0.3278 \\
-\quad 7 \\
\hline
0.3271
\end{array}
$$

40) $0.65(6.3) \div (0.78)(0.3)$

Solution:

$0.65(6.3) \div (0.78)(0.3)$

$= 4.095 \div (0.78)(0.3)$

$= 4.095 \div 0.234 = 17.5$

Answers:

1a) $\frac{7}{20}$ 1b) $2\frac{111}{125}$ 2a) $17.5625 \approx 17.563$ 2b) ≈ 56.176

3a) Three and fifty-seven thousandths

3b) One hundred ninety and forty - five ten thousandths 4a) < 4b) <

5) 6.892; 6.89; 6.9 6) 7.429; 7.43; 7.4 7) 8.998; 9.00 = 9; 9.0 = 9

8) a) \$7.50; b) \$7 9) a) \$12.79; b) \$13 10) 425.9753

11) 1775.013 12) 12.294 13) 5.103 14) 2.60225 15) 0.628

16) 11.4 17) 6.7645... ≈ 6.765 18) 35.645 19) 30.3225

20) 12.44792 21) 141.12 22) 0.1775 23) $47\frac{3}{14}$ 24) \$123.10

25) \$60,973.20 26) 62 carrots (he will have \$0.20 left) 27) \$1.10

28) 8 days 29) Mean = 5.65, Median = 5.9, and Mode = 8.9

30) Mean = $\frac{10}{21}$ inches, Median = $\frac{1}{2}$, and Mode = $\frac{1}{7}$

31) b, c, & d 32) c, d, & e 33) a, b, c, & e 34) b, c, d, & e

35) a, b, & d 36) ~~2.6~~ 37) $4\frac{13}{200}$ 38) \$84.80 39) 6.6722 40) 1.575