


For full credit, show all work.

1.	<p>The water levels of five Texas lakes were measured on the same day in 2012. The numbers below show the number of feet above or below normal level for each lake.</p> <p>0.10 -2.65 0.16 -1.43 0.07</p> <p>Which list shows the numbers above from greatest to least?</p> <p>A -2.65, -1.43, 0.16, 0.10, 0.07 B 0.16, 0.10, 0.07, -1.43, -2.65 C 0.16, 0.10, 0.07, -2.65, -1.43 D -2.65, -1.43, 0.07, 0.10, 0.16</p>	B
2.	<p>Which statement is not true?</p> <p>A -0.01 > -0.12 C $-\frac{3}{4} > -\frac{5}{8}$ B $-1\frac{2}{3} < -1$ D $-2.34 > -3.42$</p>	C
3.	<p>18 -0.324215... -20 0.015 $-\frac{26}{4}$ $-\frac{14}{3}$</p> <p>Which of the following statements is true about the list of numbers above?</p> <p>A The list contains only rational numbers. B The list contains exactly 3 integers. C The list contains exactly 1 whole number. D The list contains exactly 2 irrational numbers.</p>	C

4.	Order least to greatest: $0.35, \overline{0.35}, 3.5\%, \frac{3}{5}$	3.5%	0.35	$\overline{0.35}$	$\frac{3}{5}$
5.	Order greatest to least: $38\%, \frac{3}{8}, 0.4, 0.04$	0.4	38%	$\frac{3}{8}$	0.04

6.	<div style="text-align: center;">  <p>The percent of Tom's budget he spends on different types of expenses is shown in the circle graph above. Tom's total monthly budget is \$2,500. How much does he spend on Groceries?</p> <p>A \$375 B \$500 C \$625 D \$750</p> </div>	C
7.	Javier drove 45 miles. This represents 60% of his entire trip. What is the total number of miles in Javier's trip?	75 mi
8.	After the Fourth of July, flags go on sale and are marked down 75%. The original price of a small flag is \$5.99. What is the sale price?	\$1.50
9.	<p>Tamara has \$50 to spend on craft supplies. The tax rate is 6.25%. What is the maximum amount she can spend on craft supplies before taxes?</p> <p>A \$3.13 B \$46.87 C \$47.05 D \$48.27</p>	C
10.	<p>Luke can purchase a 12-pound item from several different retailers. Which of the following is the best buy?</p> <p>A Buy online for \$15 plus pay shipping and handling costs of \$0.79 per pound. B Buy online for \$17 plus pay shipping and handling costs of \$0.69 per pound. C Buy at a local store where the item's price is \$24.99, and use a \$3-off coupon. D Buy at a local store where the item's regular price is \$22.50 and it is on sale for 10% off.</p>	D
11.	A town's population went from 25,800 to 42,600 in 15 years. What was the percent of change? (nearest tenth of a percent)	about 65.1%
12.	<p>A gym's membership in 2010 was 8,700. Now, it is 6,400. Which expression equals the percent of change?</p> <p>A $6400 \div 8700$ C $(8700 - 6400) \div 8700$ B $8700 - 6400$ D $(8700 - 6400) \div 6400$</p>	C

13.	A store marks up sporting goods 27%. Which expression equals the retail price of an item with an original cost of p dollars? A $p \times 0.27$ B $p \div 0.27$ C $p \times 0.73$ D $p \times 1.27$	D
14.	A student spends \$48 on school supplies at a store where the sales tax is 7%. What is the total cost of the supplies, including tax?	\$51.36
15.	A merchant buys a television for \$125 and sells it for \$75 more. What is the percent of markup?	60%
16.	The population of a town doubled in 5 years, then doubled again in the next 10 years. What is the percent of increase? A 100% B 200% C 300% D 400%	C
17.	Julio bought a backpack for \$39.95 and 2 belts for \$17.99 each. The sales tax is 6.5%. How much did Julio spend for all the items, including tax?	\$80.87
18.	Mr. Mangham bought two speakers for his classroom that cost \$129.99 each. The tax rate was 8.25%. Which equation can be used to find c , the total cost of the speakers including tax? A $c = 2(129.99)(0.0825)$ C $c = 2(129.99) + 2(0.0825)$ B $c = 2(129.99 + 8.25)$ D $c = 2(129.99) + 2(129.99)(0.0825)$	D
19.	*** SALE SALE SALE *** All regularly priced books at \$25 are on sale today for 40% off. Mrs. Shabanaj believes the books will now cost \$10, not including tax. Is she correct? A Yes, because $0.4 \cdot 25 = 10$ C No, because $40 \cdot 10 \div 25 = 16$ B Yes, because $\frac{40}{100} = \frac{10}{25}$ D No, because $25 - (0.4 \cdot 25) = 15$	D
20.	Mr. Martinez has 3 ice chests. He is placing 14 lunches in each ice chest. Each lunch contains a sandwich, a bag of chips, and a drink. About 55% of these lunches contain a ham sandwich. Which of the following is closest to the number of lunches that contain a ham sandwich? A 23 B 8 C 17 D 9	A
21.	Eric the Sheep has returned to his flock. Of the 250 sheep in a flock, 34% are white. What is the total number of white sheep in the flock?	85

22.	<p>A store manager discounted the prices of several items during a sale. The original price and the sale price of each item are shown in the table below.</p> <table border="1" data-bbox="526 233 1078 499"> <thead> <tr> <th colspan="2">Store Sale</th> </tr> <tr> <th>Original Price</th> <th>Sale Price</th> </tr> </thead> <tbody> <tr> <td>\$50</td> <td>\$10</td> </tr> <tr> <td>\$60</td> <td>\$12</td> </tr> <tr> <td>\$70</td> <td>\$14</td> </tr> <tr> <td>\$80</td> <td>\$16</td> </tr> <tr> <td>\$90</td> <td>\$18</td> </tr> </tbody> </table> <p>Based on the data in the table, what would be the sale price of an item that had an original price of \$135?</p>	Store Sale		Original Price	Sale Price	\$50	\$10	\$60	\$12	\$70	\$14	\$80	\$16	\$90	\$18	\$27
Store Sale																
Original Price	Sale Price															
\$50	\$10															
\$60	\$12															
\$70	\$14															
\$80	\$16															
\$90	\$18															
23.	<p>Ben got about 92% of the problems correct on his last math test. The test had a total of 37 problems. Which of the following is the best estimate of the number of problems Ben missed?</p> <p>A 34 B 12 C 8 D 3</p>	D														

Write an equation or percent line to model and solve each problem. Show all work.

		Equation or Percent Line	Answer
24.	What is 30% of 99?	$x = 0.3 \cdot 99$	$\frac{x}{30} = \frac{99}{100}$
25.	2 is what percent of 40?	$2 = \frac{x}{100} \cdot 40$	$\frac{2}{x} = \frac{40}{100}$
26.	45% of the students in Mr. Mangham's math classes watched Fear Factor last week. 36 students watched Fear Factor. How many students does Mr. Mangham have?	$0.45x = 36$	$\frac{36}{45} = \frac{x}{100}$

27.	Mr. Mangham orders a meal at Chili's. The total cost of the food is \$24.00. If Mr. Mangham pays a 20% tip and the tax on the food (not the tip) is 8%, what will be his total cost for the meal?	\$30.72
28.	A 60 gallon tank is 80% full of water. You pour all of that water into an empty 50 gallon tank. What percent of the 50 gallon tank is filled?	96%
29.	92% of the applicants on American Idol sing off key. If there were 115 people that sang off key, how many total applicants were there for American Idol?	125
30.	Thirty-six students were asked if they like the color red or blue better. If 31 picked blue, what percentage picked blue?	86. $\bar{1}$ %

Sales and Discounts

31.-36. Hannah, a loyal employee at Coach, has been given the following sign by her boss to complete. Assist Hannah in completing the sign. *Show all work in the form of an equation or a percent line.*

Today's deal	Original Price	New Price	Savings	Today's deal	Original Price	New Price	Savings
30% off	\$62.00	\$43.40		40% off		\$15.00	\$10.00
60% discount	\$57.50	\$23.00		20% off	\$85.00		\$17.00
10% discount		\$18.00	\$2.00	80% off	\$43.75		\$35.00

Solve. Show all work.

37.	The price of broccoli rose from \$1.50 a pound to \$1.70 a pound. What was the percent change in the price of broccoli?	13. $\bar{3}$ %								
38.	Mangham Munchies can buy cheese curls for \$2.00 a bag. If he places a 40% markup on the cheese curls, for what will Mangham Munchies sell the cheese curls?	\$2.80								
39.	Jack wants to buy a llama for his sister. Llamas cost \$300 last year, but the price of a llama has dropped to \$234 this year. What is the percent change in the price of llamas?	-22%								
40.	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Year</th> <th>Population</th> </tr> </thead> <tbody> <tr> <td>2016</td> <td>4000</td> </tr> <tr> <td>2017</td> <td>3600</td> </tr> <tr> <td>2018</td> <td>4000</td> </tr> </tbody> </table> <p>What is the percent change from 2016 to 2017? What is the percent change from 2017 to 2018?</p>	Year	Population	2016	4000	2017	3600	2018	4000	2016 to 2017 -10%
		Year	Population							
2016	4000									
2017	3600									
2018	4000									
		2017 to 2018 +11. $\bar{1}$ %								

