PERCENTS Study Guide/Review

Date _Key_ Period ____

Basic % Proportions, % of Change, Tax, Total Cost, Discount, Sale Price, Tip, Commission, % of Error

1.	The best-selling book Samantha has been waiting for finally hit store shelves. The paperback price costs $21.56. What percent of discount was this off the original hardback price of $26.95? 26.95 -21.56 → discount 5.39 $\dfrac{5.39}{26.95} = \dfrac{x}{100}$	20%
2.	Eric's dad asks him to figure out the tax on the meal his family just finished eating at their favorite restaurant. The total bill for the meal is $57.60. The tax is 7.5%. What is the amount of tax they will pay for this meal? $\dfrac{7.5}{100} = \dfrac{x}{57.60}$ $4.32	$4.32
3.	For a party, Sue bought plastic plates for $3.65, cups for $4.25, three boxes of plastic table ware for $0.99 each, and a plastic table cloth for $6.75. Sales tax is 5.5%. What is the total cost for Sue's purchases, including tax? $3.65 + 4.25 + 3(.99) + 6.75 = 17.62$ $1.055 \times 17.62 = 18.59$	$18.59
4.	Mr. Jones purchased a CD player for $97.19 including tax. The CD player had a sticker price of $89.99. **About** what percent of sales tax did he pay? Round your answer to the nearest percent. 97.19 -89.99 → tax 7.2 $\dfrac{7.2}{89.99} = \dfrac{x}{100}$	8%
5.	The sales tax on a purchase of $56 is 7.5%. Which expression represents the total cost of the purchase? A. 7.5 × $56 B. 0.075 × $56 C. 0.025 × $56 D. 1.075 × $56	D
6.	Sammy served food to a group at a restaurant. The total cost of the food before tax was $62.00. The sales tax is 6% of the cost of food. The group asked Sammy to add 20% for a tip based on the before tax total. What was the total cost for the the food, tax, and tip? $\dfrac{6}{100} = \dfrac{x}{62} = 3.72$ tax $\dfrac{20}{100} = \dfrac{x}{62} = 12.4$ tip $\begin{array}{r} 62. \\ 12.4 \\ 3.72 \\ \hline 77.72 \end{array}$	$78.12
7.	A jewelry store marks its merchandise up by 80%. If the wholesale price of a bracelet is $55, what will the store charge for the retail price? $\dfrac{80}{100} = \dfrac{x}{55}$ 44 Markup $\begin{array}{r} 55 \\ +44 \\ \hline \$99 \end{array}$	$99

8.	Jillian calculates that she will take 95 minutes to run 7 miles. She runs the distance in 80 minutes. What is Jillian's <u>percent error?</u> $\frac{95}{80}$ $\frac{15}{}$ error $\frac{15}{80} = \frac{x}{100}$ actual	18.75%
9.	Eight-hundred people attended the movie theater on Sunday at 4:00. • 40% bought tickets for *Daddy's Home* • 48% bought tickets for *Star Wars* • 12% bought tickets for *Kung Fu Panda 3* How many people purchased tickets to see *Daddy's Home*? $\frac{40}{100} = \frac{x}{800}$	320
10.	If Sean's dad paid $41.40 on a meal that cost $36, what percent <u>tip did he pay?</u> 41.40 -36 5.4 ← tip $\frac{5.40}{36} = \frac{x}{100}$	15%
11.	All batteries were listed on sale for $\frac{1}{5}$ off the regular price. Keith usually pays $6.99 for a battery for his watch. Which expression represents the sale price of Keith's purchase? A. 1.20($6.99) B. 0.2($6.99) C. 0.8($6.99) D. $6.99 − 0.20 $\frac{1}{5}$ off = 20% off Save 20% pay 80% → .8 of 6.99	C
12.	In a certain week, the New York stock market went down from 1843 to 1612. What was the percent of decrease to the nearest tenth? $\frac{1843}{1612}$ $\frac{231}{1843} = \frac{x}{100}$	12.5%
13.	A real estate agent earns a weekly salary of $200. This week he only sold one home for $120,000 and is paid a commission of 5%. What are his earnings for the entire week? salary commission total $200 + (.05 \times 120000) =$	$\$6,200$
14.	Kelly bought 4 books at $20 each. What was her total after the discount? | Total Purchases	Discount
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Less than $25	10%
$25 to $50	15%
Over $50	20% | $\frac{20}{4}$ $\frac{}{80}$ 20 off pay 80% .8(80)	$\$64.$
15.	Mr. Evans sells vehicles at Town and Country Ford. He earns a 2% commission for each car or truck he sells. If he sells a $32,000 truck, what is the amount of commission he will earn for his sale? $\frac{2}{100} = \frac{x}{32000}$ 640	$\$646$

16.	Claudia bought a television at 25% discount. The original price of the television was $349. There was a 7% sales tax. How much did she pay for the television, including tax? saved 25 pay 75 .75(349) $261.75 ← sale price 1.07(261.75) $280.07	$280.07
17.	Marina thinks the cost to rent scooters is $100. The actual price is $150. What is Marina's percent error? (Write your answer as a mixed number) $\dfrac{x}{100} = \dfrac{50 \text{ error}}{150 \text{ actual}}$	$33\frac{1}{3}\%$
18.	A package of blank CDs is advertised at 4 different stores. Which has the best buy? $\frac{2}{5} = 40\%$ $\frac{1}{4} = 25\%$ A. Store 1: 10% off the regular price of $50 $45 B. Store 2: $\frac{2}{5}$ off the regular price of $50 $30 C. Store 3: 30% off the regular price of $50 $35 D. Store 4: $\frac{1}{4}$ off the regular price of $50 $37.50 48% is the best discount	B
19.	Gamers Depot marks up all video games 120%. If the wholesale price of a video game is $34, what is the amount of mark up? $\dfrac{120}{100} = \dfrac{x}{34}$	$40.80
20.	Serena's father tipped a taxi driver 20% for a $25 ride. What was the amount of the tip that he paid? $\dfrac{20}{25} = \dfrac{x}{100}$	$5
21.	Zack shot an 86 on the golf course on Monday. On Friday he shot a 95. Which proportion can you use to find the percent of increase in Zack's golf game? A. $\dfrac{9}{86} = \dfrac{x}{100}$ B. $\dfrac{9}{95} = \dfrac{x}{100}$ C. $\dfrac{86}{95} = \dfrac{x}{100}$ D. $\dfrac{95}{86} = \dfrac{x}{100}$ 95 -86 9 $\dfrac{9}{86} = \dfrac{x}{100}$	A
22.	Which does **not** represent a 25% increase? A. 24 to 30 → 25%. B. 32 to 40 → 25%. C. 16 to 20 → 25%. D. 50 to 64 → 28%.	D