

Choose the best answer. Show all work. Place letter answers in blanks.

Work Space

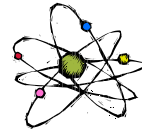
- _____ 1. The cost of Matt and Natalie's dinner was \$27.35. They want to leave a 20% tip. Which is the closest to the amount of the tip they should leave?

A. \$4.00 B. \$4.50
C. \$5.00 D. \$5.50



- _____ 2. Bradley answered 80% of the questions on his science test correctly. There were 30 questions on the test, and all the questions had equal value. How many questions did Bradley *not* answer correctly on his test?

A. 6 questions B. 18 questions
C. 24 questions D. 20 questions



- _____ 3. Ms. Loya sponsors the Spanish Club at Central Middle School. The club has 8 members who are sixth graders, 12 members who are seventh graders, and 10 members who are eighth graders. What percent of the Spanish Club are seventh graders?

A. 40% B. 30%
C. 26% D. 10%

- _____ 4. Of the 850 students at Brown Middle School, 38% are in the school band. How many students are in the school band?



A. 32 students B. 527 students
C. 323 students D. 812 students

- _____ 5. Paul made 11 of the 20 shots he took at hockey practice yesterday. What percent of his shots did he make?

A. 20% B. 11%
C. 45% D. 55%



- _____ 6. Jake spent a total of \$20 on the items below.



- 2 movie tickets for \$6 each
- 1 bag of popcorn for \$3.50
- 2 drinks for \$2.25 each

What percent of the \$20 did Jake spend on movie tickets?

A. 12% B. 40%
C. 60% D. 8%

- _____ 7. Denise tried out for a part in a musical play. Fifty young people tried for dancing roles in the play. The casting director chose five. What percent of the applicants were chosen?

A. 55% B. 10% C. 5% D. 45%

- _____ 8. Which of these terms is an equation that has equal cross-products?

A. terms B. ratio C. rate D. proportion

9. Write the percent proportion in the blank. _____

Write proportions to solve the following problems. Include units in your answers. Show all work.

10. How much will a \$635 refrigerator cost with 6% sales tax?

Work Space



11. If sales tax is 6%, then how much tax is charged on a \$75 coat?

12. The tip added to all checks at Joe's Steak House is 15%. How much is added to Sarah's bill of \$45?



13. Julie purchases a \$30 sweater that is discounted 20%. What is the sale price of the sweater?

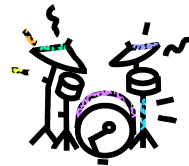
14. A swimsuit costing \$60 is on sale for 25% off. How much is the discount?



15. Sarah and Emily had lunch at The Tavern. Their food bill totals \$32. If they want to leave a 15% tip, how much should they leave?

16. At Marble Middle School, 35% of the students are 6th graders, 32% are 7th graders, and the rest are 8th graders. What percent are 8th graders?

17. Tyler wanted to purchase a drum set from the local music store. He waited until the store had a 30% off sale on musical instruments. The drum set he bought was regularly priced at \$525. How much did he pay for the drum set on sale?



18. You bought a pair of shoes for \$37, socks for \$3, and a pair of jeans for \$32 at Belk. If the sales tax rate is 5% how much did you pay for your items, including sales tax?



19. The table below shows enrollment percentages for Central Middle School.

Work Space

Grade Level	Percent of Student Body
4 th	25%
5 th	30%
6 th	20%
7 th	25%

If there are 100 students in the seventh grade, how many students are enrolled at Central Middle School?

20. A math class has studied the first 330 pages of its textbook.



If this is 75% of the entire book, how many pages are in the book?

Answer the following in your own words.

21. How do you find 10% of a number? _____

22. How do you find 5% of a number? _____

23. How do you find 15% of a number? _____

24. How do you find 20% of a number? _____

25. How do you find 25% of a number? _____

26. How do you find 50% of a number? _____

27. Compute the following using your rules from questions 21-26 and mental math strategies

10% of 24 _____ 20% of 30 _____ 15% of 24 _____

5% of 120 _____ 5 % of 24 _____ 25% of 120 _____

50% of 64 _____ 15% of 120 _____

Bonus: You need new tennis shoes, and have found a pair that you really like at two different stores. At both stores, the shoes cost \$80. The first store is in the Bristol Mall. All tennis shoes are on sale for 20% off, and the sales tax rate is 5%. The second store is in the Kingsport Mall. All tennis shoes are on sale for 25% off, and the sales tax rate is 10%. Which shoe is the better buy? Show all work below.

Bristol Mall final price = _____ Kingsport Mall final price = _____

The best buy for the shoes is at the _____ Mall.

What is the difference in prices for the two pairs of shoes? _____

Work Space



**Math 7 SOL 7.4—Consumer Math & Percents
Answer Key**

1. D
2. A
3. A
4. C
5. D
6. C
7. B
8. D

9. $\frac{p}{b} = \frac{r}{100}$ or $\frac{is}{of} = \frac{r}{100}$

10. \$673.10
11. \$4.50
12. \$6.75
13. \$24
14. \$15
15. \$4.80
16. 33%
17. \$367.50
18. \$75.60
19. 400 students
20. 440 pages

Answers will vary for #'s 21-26.

- | | | | |
|-----|-----|-----|-----|
| 27. | 2.4 | 6 | 3.6 |
| | 6 | 1.2 | 30 |
| | 32 | 18 | |

Bonus: Bristol: \$67.20
Kingsport: \$66.00
Best buy is Kingsport by \$1.20