

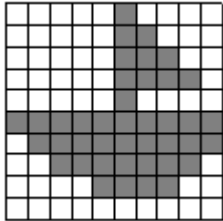
MS "B" MP5 Exam Study Guide

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

Write a ratio and a percent for the shaded area.

_____ 1.



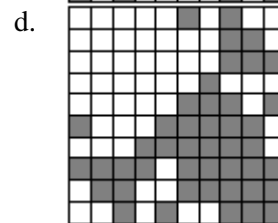
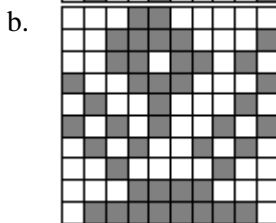
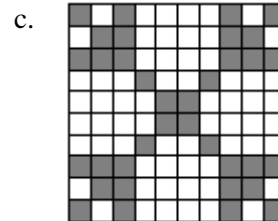
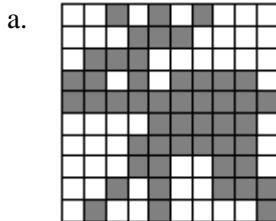
a. $\frac{41}{100}$, 41%

b. $\frac{1}{2}$, 50%

c. $\frac{2}{5}$, 40%

d. $\frac{9}{20}$, 45%

_____ 2. Model 45% on a 10 x 10 grid.



Write the ratio as a percent.

_____ 3. In the small country of Varia, a bill becomes law only if $\frac{7}{10}$ of the senators approve it.

a. 90%

b. 60%

c. 55%

d. 70%

Write the decimal as a percent.

_____ 4. 8.88

a. 0.0888%

b. 888%

c. 0.888%

d. 88.8%

Write the percent as a decimal.

_____ 5. 72.9%

a. 0.729

b. 72.9

c. 7.29

d. 7290

Order from least to greatest.

- ___ 6. 68% , $\frac{1}{2}$, 0.55 , 1.28
- a. $\frac{1}{2}$, 0.55 , 68% , 1.28 c. $\frac{1}{2}$, 68% , 0.55 , 1.28
- b. 1.28 , 68% , 0.55 , $\frac{1}{2}$ d. 1.28 , $\frac{1}{2}$, 68% , 0.55
- ___ 7. In a candy bar, 68 calories are from sugar. There are 100 calories in the candy bar. What percent of the calories are from sugar?
- a. 72% b. 68% c. 58% d. 48%

Write the percent as a decimal and as a fraction.

- ___ 8. 645%
- a. 6.45 ; $6\frac{2}{5}$ b. 64.5 ; $64\frac{1}{2}$ c. 6.45 ; $6\frac{9}{20}$ d. 64.5 ; $64\frac{3}{10}$
- ___ 9. 0.71%
- a. 0.0071 ; $\frac{71}{10,000}$ b. 0.71 ; $\frac{71}{100}$ c. 71 ; $\frac{71}{1,000}$ d. 0.071 ; $\frac{71}{100,000}$
- ___ 10. Liam wants to buy a bicycle that costs \$335.00. His parents say Liam must raise 20% of the money himself. How much money must Liam raise?
- a. \$65.00 b. \$67.00 c. \$20.00 d. \$33.50
- ___ 11. Estimate 11% of 90.
- a. 13 b. 9 c. 19 d. 4

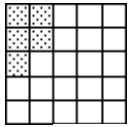
Use a proportion to solve. If necessary, round to the nearest percent.

- ___ 12. What percent of 170 is 153?
- a. 111 b. 90 c. 91 d. 153
- ___ 13. There are 12 players on the basketball roster. 9 of the players are in the 8th grade. What percent of the team is not in the 8th grade?
- a. 75% b. 25% c. 90% d. 130%
- ___ 14. 15 is 375% of what number?
- a. 5 b. 4 c. 4 d. 56.25

Use an equation to solve.

- ___ 15. What number is 70% of 420?
- a. 300 b. 292 c. 297.5 d. 294
- ___ 16. What percent of 235 is 47?
- a. 20% b. 25% c. 500% d. 500.5%
- ___ 17. a. Out of 48 job applicants, the manager chose 22 to interview. Did more than half of the applicants get an interview?
- b. What percent of the applicants got an interview? Round to the nearest whole percent.

- a. no; 45% b. yes; 48% c. yes; 46% d. no; 46%
- ___ 18. The bill is \$76.37. Find the amount of a 12% tip.
a. \$15.71 b. \$3.82 c. \$16.80 d. \$9.16
- ___ 19. Suppose you rent a limousine for a formal reception. The bill for the evening is \$50.00. A tax of 7% will be added, and you want to tip the chauffeur 17% for excellent driving. How much will you pay in total?
a. \$12.00 b. \$58.50 c. \$62.00 d. \$8.50
- ___ 20. Find the total weekly earnings for a waitress with a weekly salary of \$275 plus a 5% commission on dinners, if the total worth of the dinners she served was \$4,000.00.
a. \$475.00 b. \$200.00 c. \$537.80 d. \$460.90
- ___ 21. A music store charges \$18.50 for a CD plus a 0.5% city tax and a 4% state tax.
a. How much will you pay for the CD? Round to the nearest cent.
b. How many more tax dollars does the state get than the city? Round to the nearest cent.
a. \$19.33, \$0.74 c. \$19.30, \$0.65
b. \$19.33; \$0.65 d. \$19.33, \$0.09
- ___ 22. Find the percent of discount. Round to the nearest tenth.
original price \$20,165; selling price \$15,340
a. 31.8% b. 23.9% c. 48.3% d. 31.5%
- ___ 23. A new piece of furniture in your room will occupy the shaded space on the floor plan below. Write a ratio of the area the furniture occupies compared to the area of your room. Then write as a percent.



- a. $\frac{5}{25}$, 30% b. $\frac{1}{5}$, 20% c. $\frac{1}{5}$, 25% d. $\frac{1}{4}$, 25%
- ___ 24. Write a ratio and a percent for the shaded area.



- a. $\frac{9}{10}$; 9% b. $\frac{1}{10}$; 1 c. $\frac{9}{10}$; 90% d. $\frac{1}{10}$; 10
- ___ 25. Estimate a 15% tip for a \$21.14 meal.
a. \$24.15 b. \$1.05 c. \$2.10 d. \$3.15