

MS C/Transition MP4 Exam Study Guide

Multiple Choice

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

- ____ 1. Write two different ratios equal to 6 : 30.
a. $\frac{4}{20}, \frac{1}{6}$ b. $\frac{5}{20}, \frac{1}{6}$ c. $\frac{5}{20}, \frac{1}{5}$ d. $\frac{4}{20}, \frac{1}{5}$
- ____ 2. Write the ratio 42 : 6 in simplest form.
a. 8 : 1 b. 7 : 1 c. 1 : 8 d. 1 : 7

Find the value that makes the ratios equal.

- ____ 3. ■ to 24, 8 to 3
a. 65 b. 64 c. 72 d. 80
- ____ 4. $\frac{18}{24} = \frac{6}{?}$
a. 2 b. 18 c. 8 d. 3

Find the unit rate for the situation.

- ____ 5. \$5.20 for 8 cans
a. \$.55 per can b. \$.60 per can c. \$.65 per can d. \$.70 per can
- ____ 6. The cost of gasoline is \$2.55 per gallon. Write the unit rate as a ratio. Then write an equal ratio to find the cost of 8 gallons.
a. $\frac{\$2.55}{1 \text{ gallon}} = \frac{\$25.50}{8 \text{ gallons}}$ c. $\frac{\$2.55}{1 \text{ gallon}} = \frac{\$22.95}{8 \text{ gallons}}$
b. $\frac{\$2.55}{1 \text{ gallon}} = \frac{\$10.55}{8 \text{ gallons}}$ d. $\frac{\$2.55}{1 \text{ gallon}} = \frac{\$20.40}{8 \text{ gallons}}$
- ____ 7. At an average rate of 38 miles an hour, how far can you travel in 4 hours?
a. 156 mi b. 195 mi c. 190 mi d. 152 mi

Find the value that completes the proportion.

- ____ 8. $\frac{21}{?} = \frac{9}{15}$
a. 6 b. 13 c. 27 d. 35
- ____ 9. Solve the first proportion for x. Use that value to solve the second proportion for y.
 $\frac{x}{24} = \frac{9}{72}, \frac{x}{9} = \frac{y}{12}$
a. $x = 3, y = 4$ b. $x = 4, y = 3$ c. $x = 27, y = 36$ d. $x = 3, y = 6$
- ____ 10. A car travels 136 miles using 7 gallons of gas. At that rate, how far can the car travel using 42 gallons of gas?
a. 1,224 mi b. 816 mi c. 952 mi d. 1,088 mi

Solve the proportion.

___ 11. $\frac{21}{18} = \frac{28}{\quad}$

- a. 22 b. 48 c. 44 d. 24

___ 12. A map has a scale of 3 centimeters : 8 kilometers. If two cities are 11 centimeters apart on the map, what is the actual distance between the cities, to the nearest tenth of a kilometer?

- a. 41.3 km b. 29.3 km c. 4.1 km d. 293.3 km

Write the percent as a decimal.

___ 13. 4%

- a. 0.004 b. 4 c. 0.04 d. 0.4

Write the decimal or fraction as a percent.

___ 14. $\frac{2}{5}$

- a. 200% b. 400% c. 20% d. 40%

___ 15. $\frac{2}{30}$

- a. $0.0\bar{6}\%$ b. $0.00\bar{5}\%$ c. $0.\bar{6}\%$ d. $0.0\bar{5}\%$

Use a calculator, paper and pencil, or mental math to write the decimal or fraction as a percent. Round to the nearest percent.

___ 16. $0.\bar{1}$

- a. 11% b. 110% c. 10% d. 1%

___ 17. A baseball player got a hit 3 out of every 10 times he was at bat. Write $\frac{3}{10}$ as a percent.

- a. $\frac{3}{10}\%$ b. 0.3% c. 3% d. 30%

___ 18. Use a proportion to find 60% of 38.

- a. 228 b. 2.28 c. 0.98 d. 22.8

___ 19. There were 12 students on a field trip. While outside, 25% of the students wore jackets. How many students wore jackets?

- a. 4 students b. 6 students c. 3 students d. 5 students

___ 20. Of the 380 students at Central Middle School, 25% are on the honor roll. How many students are on the honor roll?

- a. 95 students b. 105 students c. 85 students d. 100 students

___ 21. Scott earned \$200 babysitting. He saved 30% of his money. Use mental math to find how much he saved.

- a. \$70 b. \$60 c. \$65 d. \$75

Estimate the sale price of the item.

___ 22. 60% off a pair of shoes for \$51.95

- a. \$40 b. \$30 c. \$20 d. \$26

___ 23. Estimate 4.7% of 160.

- a. 80 b. 16 c. 47 d. 8

- _____ 24. Estimate a 15% for a \$26.40 restaurant bill.
- a. \$1.50 b. \$4.00 c. \$6.00 d. \$8.00
- _____ 25. Write 63% as a fraction in simplest form.
- a. $\frac{63}{100}$ b. $\frac{63}{10}$ c. $\frac{100}{63}$ d. $\frac{10}{63}$