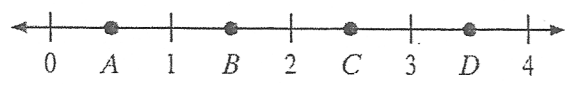


# MCAS Packet

1 Which point shows the location of  $\frac{3}{2}$  on the number line?



- A point A
- B point B
- C point C
- D point D

CSM02088

2 Which list of numbers is ordered from least to greatest?

- A  $\frac{1}{2}, 2\frac{1}{2}, 0.2, 0.02$
- B  $0.02, 0.2, 2\frac{1}{2}, \frac{1}{2}$
- C  $0.02, 0.2, \frac{1}{2}, 2\frac{1}{2}$
- D  $0.2, \frac{1}{2}, 0.02, 2\frac{1}{2}$

CSM10996

3 Which of the following fractions is closest to 0?

- A  $-\frac{5}{12}$
- B  $-\frac{2}{3}$
- C  $\frac{5}{6}$
- D  $\frac{3}{4}$

CSM02279

4 What is the order of the following set of numbers from greatest to least?

$$1\frac{1}{3}, \frac{2}{3}, -\frac{1}{3}, \frac{9}{5}$$

- A  $-\frac{1}{3}, \frac{2}{3}, \frac{9}{5}, 1\frac{1}{3}$
- B  $-\frac{1}{3}, 1\frac{1}{3}, \frac{2}{3}, \frac{9}{5}$
- C  $\frac{9}{5}, \frac{2}{3}, 1\frac{1}{3}, -\frac{1}{3}$
- D  $\frac{9}{5}, 1\frac{1}{3}, \frac{2}{3}, -\frac{1}{3}$

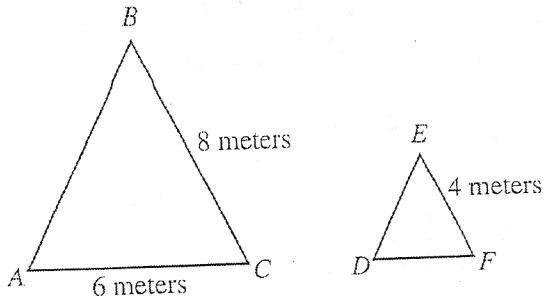
CSM21467

5 The weekly milk order for the Tranquility Inn includes 40 gallons of low-fat milk and 15 gallons of chocolate milk. What is the ratio of the number of low-fat gallons to chocolate gallons in the Tranquility Inn's weekly milk order?

- A 3:1
- B 5:1
- C 5:3
- D 8:3

CSM10813

- 6  $\triangle ABC$  is similar to  $\triangle DEF$ . What is the length of  $\overline{DF}$ ?



- A 2 meters
- B 3 meters
- C 5 meters
- D 10 meters

CSM02300

- 7 A farmer harvested 14,000 pounds of almonds from an 8-acre orchard. Which proportion could be solved to find  $x$ , the expected harvest from a 30-acre orchard?

- A  $\frac{8}{14,000} = \frac{x}{30}$
- B  $\frac{8}{14,000} = \frac{30}{x}$
- C  $\frac{30}{14,000} = \frac{x}{8}$
- D  $\frac{30}{14,000} = \frac{8}{x}$

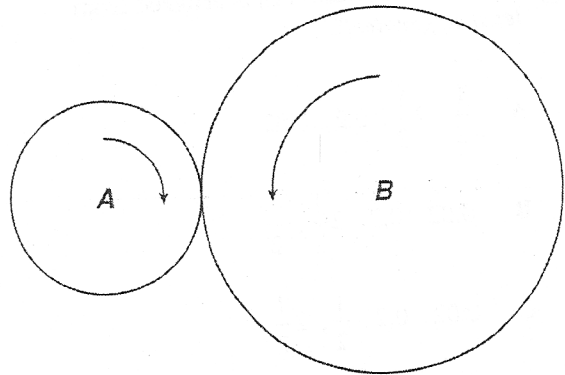
CSM00274

- 8 A certain map uses a scale of 1 inch equals 25 miles. How many miles are represented by 5 inches on this map?

- A 5
- B 25
- C 50
- D 125

CSM1688

- 9 When wheel B turns 2 revolutions, wheel A turns 5 revolutions. When wheel A turns 40 revolutions, how many revolutions does wheel B turn?



- A 4
- B 16
- C 80
- D 100

CSM21685

- 10 A company makes 5 blue cars for every 3 white cars it makes. If the company makes 15 white cars in one day, how many blue cars will it make?

A 9  
B 13  
C 17  
D 25

CSM10532

- 11 In a scale drawing,  $\frac{1}{2}$  inch represents 3 feet. If the same scale is used, how many inches will be needed to represent 24 feet?

A 2 inches  
B 4 inches  
C 8 inches  
D 12 inches

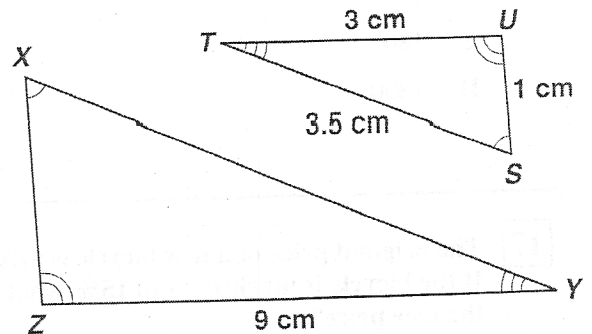
CSM02304

- 12 A survey of 1000 registered voters revealed that 450 people would vote for candidate A in an upcoming election. If 220,000 people vote in the election, how many votes would the survey takers predict candidate A should receive?

A 44,500  
B 48,900  
C 95,000  
D 99,000

CSM20677

- 13 If  $\triangle XYZ$  is similar to  $\triangle STU$ , what is the length of  $\overline{XY}$  in centimeters?



A 9  
B 10.5  
C 12  
D 12.5

CSM21684

- 14 The vice president of sales took a client out to lunch. If the lunch was \$44 and she gave a 20% tip, how much money did she spend on lunch?

A \$8.80  
B \$35.20  
C \$52.80  
D \$53.80

CSM02381

- 15 If 50% of a number is 20, what is 75% of the number?

A 8  
B 15  
C 30  
D 45

CSM10997

16 What is 60% of 30?

- A 1.8
- B 18
- C 180
- D 1800

CSM02075

17 The original price of a new bicycle is \$138.00. If the bicycle is marked down 15%, what is the new price?

- A \$20.70
- B \$117.30
- C \$123.00
- D \$153.00

CSM11365

18 What is  $\frac{10}{11} \times \frac{11}{12}$ ?

- A  $\frac{5}{6}$
- B  $\frac{21}{23}$
- C  $1\frac{1}{120}$
- D 2

CSM10621

19

$$\frac{7}{9} \times \frac{2}{9} =$$

- A  $\frac{9}{81}$
- B  $\frac{14}{81}$
- C  $\frac{9}{9}$
- D  $\frac{14}{9}$

CSM20780

20 What is the product of  $\frac{2}{5}$  and  $\frac{4}{5}$ ?

- A  $\frac{1}{5}$
- B  $\frac{8}{25}$
- C  $\frac{1}{2}$
- D  $\frac{6}{5}$

CSM20782

21 A group of hikers climbed from Salt Flats (elevation -55 feet) to Talon Bluff (elevation 620 feet). What is the difference in elevation between Talon Bluff and Salt Flats?

- A 565 feet
- B 575 feet
- C 665 feet
- D 675 feet

CSM02089

**22**

$12 \div -3 =$

- A 9
- B 4
- C  $-\frac{1}{4}$
- D -4

CSM02078

**23**

One morning, the temperature was  $5^\circ$  below zero. By noon, the temperature rose  $20^\circ$  Fahrenheit (F) and then dropped  $8^\circ$ F by evening. What was the evening temperature?

- A  $17^\circ$  below zero
- B  $15^\circ$  below zero
- C  $12^\circ$  above zero
- D  $7^\circ$  above zero

CSM11901

**24**

$-4 + (-3) =$

- A -7
- B -1
- C 1
- D 7

CSM02079

**25**

The price of a share of stock for company XYZ at the beginning of the week was \$24.75. Over the next five days, the stock gained \$2.50 on Monday, lost \$3.25 on Tuesday, lost \$0.75 on Wednesday, gained \$1.25 on Thursday, and gained \$4.75 on Friday. What was the price of the share of stock at the end of Friday?

- A \$12.25
- B \$25.75
- C \$29.25
- D \$37.25

CSM11170

**26**

The ticket prices to a play are \$5.00 for teachers and \$3.00 for students. How much will it cost for a group of 71 students and 5 teachers to see the play?

- A \$228.00
- B \$238.00
- C \$370.00
- D \$380.00

CSM20650

**27**

A soccer team has \$90.00 to buy soccer balls. If one soccer ball costs \$15.60, what is the greatest number of soccer balls the team can buy?

- A 4
- B 5
- C 6
- D 7

CSM20078

28

$$\frac{3}{8} + \frac{1}{12} =$$

- A  $\frac{1}{5}$
- B  $\frac{1}{6}$
- C  $\frac{11}{24}$
- D  $\frac{11}{48}$

CSM00243

29

What is the greatest common divisor of 54, 36, and 24?

- A 2
- B 3
- C 6
- D 9

CSM11095

30

What is  $\frac{12}{60}$  expressed in lowest terms?

- A  $\frac{1}{8}$
- B  $\frac{1}{6}$
- C  $\frac{1}{5}$
- D  $\frac{1}{4}$

CSM20746

31

What value of  $k$  makes the following equation true?

$$k \div 3 = 36$$

- A 108
- B 98
- C 39
- D 12

CSM01355

32

The Sojourn family went on a vacation. They started with \$2000. If they spent \$150 each day, which expression represents how much money they had after  $x$  days?

- A  $1850x$
- B  $2000 - 150x$
- C  $150x$
- D  $2000 + 150x$

CSM02298

33

Ellen had some change in her pocket. After her friend gave her \$0.45, Ellen had \$1.35 altogether. Which equation can she use to find the original amount of money,  $m$ , she had in her pocket?

- A  $m + 0.45 = 1.35$
- B  $1.35 = m - 0.45$
- C  $m = 1.35 \times 0.45$
- D  $m + 1.35 = 0.45$

CSM20685