

- 1) The ingredients and amounts listed below are needed for a recipe that makes exactly 8 servings.

1 cup flour
2 eggs
$\frac{1}{2}$ cup of milk

How many cups of flour are needed to make exactly 20 servings?

- A) 1 cup
B) 1.5 cups
C) 2 cups
D) 2.5 cups
E) 3 cups
- 2) If a and b are integers such that $a > 0 > b$, then which of the following statements must be true?
- A) $-b > -a > 0$
B) $0 > -a > -b$
C) $0 > -b > -a$
D) $-b > 0 > -a$
E) $-a > -b > 0$
- 3) For real numbers a and b , which expression is a simplified form of $(p + q) + [-2(p + q)]$?
- A) 0
B) $-p - q$
C) $p + q$
D) $-3p + 3q$
E) $3p - 3q$
- 4) A magazine offers yearly subscriptions for \$120. Each magazine issue costs \$5. If a new issue is released every week, how much could be saved by purchasing a subscription instead of buying each issue individually over a year?
- A. \$140
B. \$100
C. \$260
D. \$60
E. \$120

- 5) Approximately 600 people were estimated to have participated in a community gathering last week. What is the most accurate range for the actual number of attendees?
- A) 500 and 600
B) 550 and 600
C) 550 and 650
D) 600 and 650
E) 600 and 700
- 6) Which statement about performing an arithmetic operation with one positive and one negative number is always true?
- A) With addition, the answer is always a negative number.
B) With subtraction, the answer is always a negative number.
C) With multiplication, the answer is always a positive number.
D) With division, the answer is always a negative number.
E) All the statements are true.
- 7) The temperature decreases by 2°C every hour starting from 8°C at 6:00 AM, what will be the temperature in degrees Celsius ($^{\circ}\text{C}$), at 12:00 PM?
- A) 0°
B) -2°
C) -4°
D) -6°
E) -8°
- 8) Which data set would most likely consist only of whole numbers?
- A) The volume of water in different-sized bottles
B) The count of daily visitors to a local museum.
C) The exact height of several students in a classroom
D) The weight of letters for postage
E) The height of plants in a garden

- 9) Candidate Jenkins won roughly 18% of the 81,273 votes cast in a recent election. Which expression best estimates the number of votes Jenkins received?

A) $80,000 * 0.10$
B) $80,000 \div 0.20$
C) $90,000 * 0.10$
D) $80,000 * 0.20$
E) $90,000 * 0.20$

- 10) A local gym offers yoga classes on Tuesday, Thursday, and Saturday each week. On each of these days there are three class sessions: one at 9 AM, one at 12pm, and another class at 6:00 PM. How many total yoga classes are offered each week?

A) 3
B) 4
C) 6
D) 9
E) 12