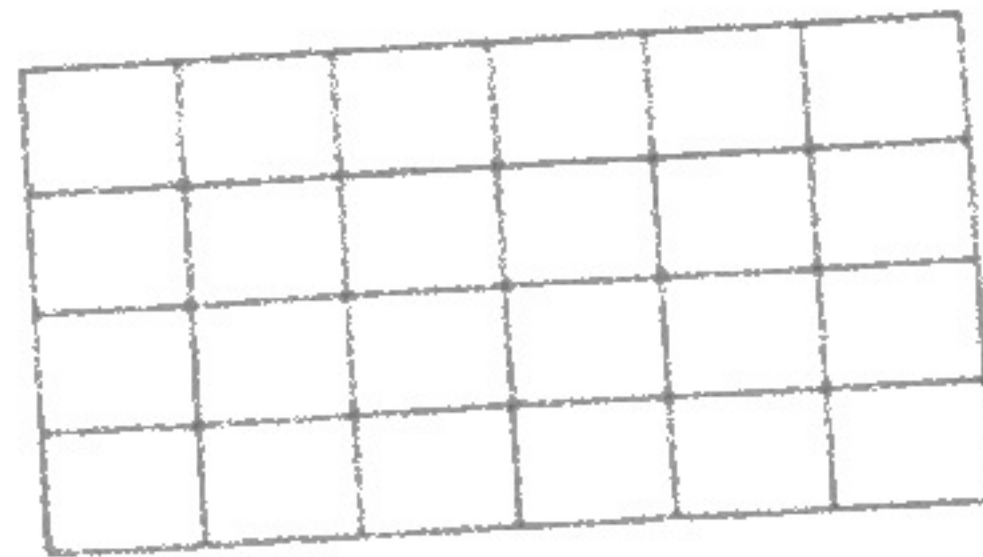


5. (MAMDMN1) Find the aspect ratio of this rectangle.



- A. 4:4
- B. 6:4
- C. 6:6
- D. None of the above

6. (MAMDMD1) The combo meal sale is a huge success. They release some data showing their percentages of how often items were chosen:

Sandwich	Side	Drink
<input checked="" type="checkbox"/> Jr. Bacon Cheeseburger (65%)	<input checked="" type="checkbox"/> Fries (63%)	Coke (33%)
Crispy Chicken Sandwich (35%)	Salad (17%)	Diet Coke (18%)
	<input checked="" type="checkbox"/> Baked Potato (20%)	<input checked="" type="checkbox"/> Dr. Pepper (26%)
		Sprite (23%)

So, based on these sales numbers, what are the odds that the next customer orders a Jr. Bacon Cheeseburger, fries or potato, and a Dr. Pepper? (Multiply)

$$.65(.83)(.26)$$

$$.14 = 14\%$$

In his first season with the Braves, Boone Logan set a record for slugging average that would stand for more than 20 years. In 2002, Logan pounded 110 hits in 428 at-bats. His hits consisted of 63 singles, 38 doubles, 6 triples, and 45 home runs, resulting in a total base count of $(63 \cdot 1) + (38 \cdot 2) + (6 \cdot 3) + (45 \cdot 4) = 400$. When his total number of bases (400) is divided by his total at-bats (428), the result is .934, his slugging percentage for the season. This record was broken in 2005 by Alex Rodriguez who had 451 total bases in 476 at-bats for a slugging average of .947.

$$S=58$$

$$D=24$$

$$T=8$$

$$HR=59$$

$$AB=367$$

7. (MAMDMN1) Find the slugging average for a player with the statistics listed above:

- A. .524
- B. .779
- C. .883
- D. .736
- E. Not here

$$58(1) + 24(2) + 8(3) + 39(4) = 286$$

$$\frac{286}{367} = .779$$

Use the following information to answer questions 8-9:

$$\text{Actual mileage} = k \cdot \text{odometer reading (mileage)}$$

$$\text{Actual speed} = k \cdot \text{speedometer reading (miles per hour)}$$

$$\text{Where } k = \frac{\text{circumference of bigger tire}}{\text{circumference of factory-installed tire}}$$

8. (MAMDMN1) If the odometer reading is 30,000 miles on your car and you have tires with a circumference of 103 inches, you have actually traveled _____ miles. (The factory-installed tires circumference is 93 inches.)

$$\frac{103}{93} = 1.1075$$

$$30,000(1.1075) = 33,225$$

9. (MAMDMN1) If the speedometer reading is 60 mph on your car and you have tires with a circumference of 103 inches, you are actually traveling _____ mph. (Factory-installed tires circumference is 93 inches.)

$$60(1.1075) = 66.45 \text{ mph}$$

10. If you bring your laptop to a pawn shop and exchange it for \$300, you will be charged a 20% handling fee as well as a holding fee of 3.5% for a 30-day period. After 30 days, how much money will you owe the pawn shop?

$$\text{A. } \$70.50$$

$$\text{B. } \$25.55$$

$$300(.20) = 60$$

$$300(.035) = 10.5$$

$$\underline{\$70.50}$$