1. Olivia currently has an 82 daily average in math. This average is based on 7 grades. Mrs. Cavazos decided to drop the lowest daily grade, which is a 64 for Olivia. Which equation can be used to find n, Olivia’s new daily average in math?

A $n= \frac{(82 - 64)7}{6}$ C $n= \frac{82∙7 - 64}{6}$

B $n= \frac{82 - 64}{2}$ D $n= \frac{82∙7 - 64}{7}$

2. Which problem situation matches the equation below?

 15*x* = 120

A Chang collected 120 foreign postage stamps last year. He gave 15% of them to friends. What is *x*, the number of stamps Chang did not give away?

B Cece exercised 120 minutes each day for 15 days last month. What is *x*, the total number of hours Cece exercised last month?

C Dementria drove a total of 120 miles this week. She drove 15 miles more this week than she drove last week. What is *x,* the number of miles Demetria drove last week?

D Adam charges $15 per hour for labor to repair lawn mowers. What is *x*, the number of hours Adam worked if he charged $120 for labor?

3. Joy’s math test grades are 85 and 79. Which equation can be used to find g, the minimum grade that Joy needs to make on her next test to have a test average of an 80?

A $80= \frac{85+79}{2}$ + g C $g= \frac{85+79+80 }{3}$

B $80= \frac{85+79 + g}{3}$ D $g= \frac{85 +79 }{2}$

4. The 7th grade Wildcat maroon (boys) basketball team consists of 12 players. Their combined weight and the weight of their coach is 1,670 lbs. If the coach weighs 230 lbs., which equation can be used to find w, the average weight of a player on this team?

A $w = \frac{1670}{13}$ C $w = \frac{1670}{13} -230$

B $w = \frac{1670}{12}$ D $w = \frac{1670 -230 }{12}$

5. The spiny-tailed iguana can run at a speed of 21 mph. Which equation can be used to find m, the distance in miles that the spiny-tailed iguana can travel in half an hour?

d

r

t

A $m=21∙5$ C $m=21(0.5)$

B $m=21÷0.50$ D $m=21(30)$

6. Sean wrote the equation below.

 4y = 36

Which problem is represented by Sean’s equation?

A Samantha has 36 ounces of candy. If she eats 4 ounces how much candy does she have left?

B The perimeter of a scare is 36 inches. What is the length of one side of the square?

C The length of a side of a rectangle is 4 centimeters. If the perimeter is 36 centimeters, what is the width of the rectangle?

D Vi has $4 more than Leslie. Together they have $36. How much money does Leslie have?

7. Paul repairs lawn equipment. He charges $24 per hour for labor. If Paul charged a lawn company $300 for labor on several pieces of equipment, which equation can be used to find h, the number of hours that Paul worked on the company’s equipment?

A $24h=300$ C $h=300 ∙24$

B $300h=24$ D $h÷24 =300$

8. Derek has d dollars. Ernie’s money, e, is 2 more than triple Derek’s dollars. Which equation can be used to find Ernie’s amount of money?

A $e = 2d+3$ C $d = 3e+2$

B $e = 3d-2$ D $e = 3d+2$

9. Which problem situation matches the equation below?

 x – 4.72 = 5.28

A Sergio’s Lunch cost $4.72. He received $5.28 in change when he paid the bill. What is *x*, the amount of money he gave the cashier?

B Yvette cycled 4.72 kilometers in a race. The winning cyclist’s time was 5.28 seconds faster than Yvette’s. What is *x*, the time in seconds it took Yvette to finish the race?

C Janice and Maura measured the wingspans of butterflies in science class. Janice’s butterfly had a wingspan of 4.72 centimeters and Maura’s butterfly had a wingspan of 5.28 centimeters. What is *x*, the average length of a butterfly’s wingspan?

D Mrs. Castro paid $4.72 for a jar of iced-tea mix that was originally priced at $5.28. What is *x*, the amount of money that Mrs. Castro saved altogether?

10. Eight of the CMS math teachers ordered a basic lunch combo from Subway; it cost $5.75. Half of these teachers also got a chocolate chip cookie for $0.65 each. Mrs. Lowe and Mrs. Kirchoff each had a $3 coupon. Which equation can be used to find c, the total cost of the CMS math teachers’ meals, disregarding tax?

A $c=8\left(5.75\right)+4\left(0.65\right)-3$

B $c=8\left(5.75\right)+0.5\left(0.65\right)-2(3)$

C $c=8\left(5.75\right)+4\left(0.65\right)+2(3)$

D $c=8\left(5.75\right)+4\left(0.65\right)-2(3)$

11. Which situation is best represented by the equation x – 4 = 16?

A Miranda picked 16 apples and ate $\frac{1}{4}$ of them. What is *x*, the number of apples she had left?

B Felipe ran for 16 minutes and walked for 4 minutes. What is *x*, the difference between the time he spent running and the time he spent walking?

C Jordan spent $4 of his allowance and had $16 left. What is *x*, the total amount of Jordan’s allowance?

D Cecilia has hit 4 of the last 16 balls pitched. What is *x*, the total number of balls pitched?

12. Wendy is w years old. Kelsey’s age, k, is 3 less than twice Wendy’s age. Which of the following equations best represents Wendy’s age?

A $k = 2w+3$ C $k = 2w-3$

B $w = 2k-3$ D $k = 3- 2w$

13. Which situation matches the equation below?

 2*x*(12.50) = 200

A A triangle has a base of 12.50 inches and area of 200 square inches. What is the height of the triangle?

B Haley works the same number of hours each of the 2 days of the weekend. She earns $12.50 an hour. If Haley earns $200 in one weekend , how many hours does she work each day?

C The Delta Paper Company has 200 employees doubled and then increased by 12.50%, how many employees does the company currently have?

D During the school fundraiser, Rory raised $12.50 more than Alyssa. Allen raised twice as much as both of them combined. If Allen raised $200, how much money did Alyssa raise?

14. Bailey has an 84 on her first six daily grades in math. If Bailey makes a 92 on her next daily assignment, which equation can be used to find n, her new daily average?

A $n= \frac{(84+ 92)6}{7}$ C $n= \frac{84∙6 + 92}{6}$

B $n= \frac{84∙6 + 92}{7}$ D $n= \frac{84∙6 -92}{7}$

15. Which problem situation could best be represented by the equation below?

 12*x* = 30

A Kristen earned $12 repairing a computer. If she charges $30 per hour, what is *x*, the number of hours she spent repairing this computer?

B Neil drove 12 miles to school and back for 30 days. What is *x*, the total number of miles he drove those days?

C Claudia had 30 free minutes left on her cell phone plan. If she used 12 of the minutes, what is *x*, the number of free minutes she has remaining?

D Josh had braces on his teeth for 30 months. What is *x*, the number of years he wore braces?