Spiral Review – 7th Grade Math www.FCMScubs.pbworks.com Name: _____

Date: _____ Period: 2 3 4 5 6 7

Week 15

1. Sue wants to solve the following equation:

$$\frac{x}{6} - 5 = 12$$

What step should she take first?

A. Multiply both sides by 6.
B. Subtract 12 by both sides.
C. Subtract 5 by both sides.
D. Add 5 to both sides.

MS7 12-1

2. Use the order of operations to find which expression is true.

A. $8 + 12(14 - 4) + 6 = 206$
B. $10 - 8 \times 6 + 7 = 26$
C. $14 + 6(7 - 3) - 8 = 30$
D. $4 + 5(6 + 2) - 5 = 66$

MS7 1-5

3. What value of y makes the equation true?

$$72.021 - y = -32.26$$

A. 104.282
B. 39.761
C. 104.281
D. 2.23

MS7 1-11

4. Which expression is equivalent to $24x$?

A. $2^2 \cdot 6x + 8x - 6$
B. $22x + 6x \cdot 3^2 \div 27$
C. $15(5x - 3) - 12x$
D. $12x + 3 \cdot 10x \div 2$

MS7 1-9

5. When Nick entered the 5th grade, he was $58\frac{1}{2}$ inches tall. When he entered 6th grade, he had grown $4\frac{3}{4}$ inches. How tall was Nick when he entered 6th grade?

A. $62\frac{1}{4}$ inches
B. $62\frac{1}{2}$ inches
C. 63 inches
D. $63\frac{1}{4}$ inches

MS7 3-9

6. What is the value of the expression $3x^2 + 5y$ when $x = 4$ *and* $y = 3$?

A. 27
B. 38
C. 63
D. 159

MS7 1-9

7. Solve $4x - 8 + 6x - 12 = 10$

A. 2
B. 3
C. 4
D. 5

MS7 12-1

8. A taxicab costs \$1.25 for the first mile and \$0.25 for each additional mile. Write an equation for the total cost of a taxi ride if it is \$8.00, where x is the number of miles.

A. $1.25x + 0.25 = 8.00$
B. $1.25 + 0.25 = 8.00$
C. $8.00x + 0.25 = 1.25$
D. $1.25 + 0.25x = 8.00$

MS7 12-1

9. Simplify: $-2(6a - 2b + 4c - 9)$

A. $-12a - 2b + 4c - 9$
B. $12a - 2b + 4c - 9$
C. $12a + 4b + 8c - 18$
D. $-12a + 4b - 8c + 18$

MS7 1-9

10. Carla is collecting rainwater in a rain barrel. Currently she has 18 inches of water in the barrel. If rain is falling at a rate of 1.5 inches per hour, which expression can be used to model the number of inches of rain in the barrel after h hours?

A. $1.5h + 18$
B. $18 - 1.5h$
C. $1.5 + 18h$
D. $(1.5 + 18)h$

MS7 1-7

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11. According to the chart, how much material would Jamie need to make a skirt and a matching cape?

A. $6\frac{1}{2}$ yards
B. 7 yards
C. $7\frac{1}{2}$ yards
D. 8 yards

Material Needed

Skirt	Shirt	Shorts	Cape
$2\frac{5}{6}$ yards	$1\frac{7}{8}$ yards	$1\frac{2}{3}$ yards	$4\frac{1}{6}$ yards

MS7 3-9

12. Andy sees this lunch special in a restaurant window. Andy and two friends each order the special plus one extra meatball. Which expression gives the total cost?

A. $3 \cdot \$4.50 + 3 \cdot \$0.75$
B. $9 \cdot (\$4.50 + \$0.75)$
C. $3 \cdot \$4.50 + \$0.75$
D. $3 \cdot \$0.75 + \$4.50$

MS7 1-5

13. Solve and Simplify. $12\frac{2}{3} - 7\frac{3}{4}$

A. $\frac{59}{12}$
C. $4\frac{11}{12}$
B. $\frac{245}{12}$
D. $5\frac{1}{12}$

MS7 3-9

14. Which of the following equations does NOT have a solution of $x = 4$?

A. $13x = 52$
B. $x - 6 = 2$
C. $x + 16 = 20$
D. $\frac{x}{2} = 2$

MS7 1-10

15. What is the value of the expression $15s - 4t$ when $s = 6$ and $t = 2$?

A. 16
B. 19
C. 72
D. 82

MS7 1-9

16. Jason earns $12.50 per hour. He worked on a job from 9:30 AM to 5:00 PM. If he spent $20 on materials for the job, how much money does he have left over?

A. $61.25
B. $86.25
C. $93.75
D. $73.75

MS7 1-10

17. Solve.

$$3(z - 1) + 8 = 14$$

A. $z = 3$
B. $z = 8\,{}^{1}/_{3}$
C. $z = -3$
D. $z = -8\,{}^{1}/_{3}$

MS7 12-2

18. Which of the following equations does NOT have a solution of 5?

A. $18 - n = 13$
B. $15 = \frac{60}{n}$
C. $46 + n = 51$
D. $8n = 40$

MS7 1-10

19. Look at the graph below. The graph represents the solution set of an inequality that has been solved for the variable x.

Part I: Write the solution set described in the graph.

Part II: Is it possible that the graph represents the solution for the inequality $-3x < 6$? Support your answer with words and a mathematical representation.

MS7 12-4