STUDY GUIDE: Multi Digit Whole Number and Decimal Fraction Multiplication

Name: _____ #_____

Date: _____

Module 2: Mid Module Assessment

5.NBT.5, 5.NBT.7, 5.OA.1, 5.OA.2, 5.MD.1

1. Complete the chart. 5.OA.1

Words	Expression	The Value of the Expression
a. 40 times the sum of 54 and 26	$40 \times (54+26) = 40 \times 80$	$= 3{,}200$
b. Divide the difference between 1,400 and 400 by 5	$(1400-400) \div 5$	$= 200$
c. The sum of 26 fifteens and 14 fifteens	$(26 \times 15) + (14 \times 15)$ $(26+14) \times 15$	$= 600$
d. 10 times the sum of 22 and 8	$10 \times (22+8)$	$= 300$
e. 15 times the sum of 150 and 50	$15 \times (150+50)$ 15×200	$= 3{,}000$
f. the sum of 260 and 740 times 13	$(260+740) \times 13$ 1000×13	$= 13{,}000$

2. Without calculating, compare the expressions below using <, >, =. 5.OA.2

a. 100×4 (=) $100 \times (6-2)$
 100×4

b. 24×12 (>) 26 twelves - 3 twelves
 $(26 \times 12) - (3 \times 12)$
 23×12

c. 24×19 (>) 9 twenty-fours, doubled
 $9 \times 24 \times 2 = (9 \times 2) \times 24 = 18 \times 24$

3. Use an area model to find the product of 614 and 44. Be sure to circle the final product 5.NBT.5

	600	10	4
4	2400	40	16
40	24000	400	160

$= 2{,}456$

$= 24560$

$27{,}016$

4. Find the product of 657 and 506 using standard algorithm. 5.NBT.5

$$\begin{array}{r} {}^{2}{}^{3} \\ 657 \\ \times\ 506 \\ \hline 3942 \\ 1\,0000 \\ 328500 \\ \hline 332{,}442 \end{array}$$

5. 5.NBT.7 For a field trip, the school bought 57 sandwiches for $3.60 each and 49 bags of chips for $1.15 each. How much did the school spend in all?

$(57 \times 3.60) + (49 \times 1.15)$

They spent $261.55.

~~202~~ 205.20
+ 56.35
261.55

13
3.60
x 57
2520
+18000
205.20

9
1.15
x 49
1035
+4600
56.35

6. 5.OA.1 Write an expression matches the statement, "the sum of 15 and 9 subtracted from 89".

$89 - (15+9)$

7. 5.MD.1 Which two conversions are correct?

A. 18 m = 0.18 cm
B. 4.5 m = 4,500 cm
C. 1800 mm = 18 m
D. 25 km = 25,000 m
E. 200 cm = 2 m

8. 5.NBT.5 What would be a reasonable estimate for 507 x 42?

500 x 40
20,000

9. 5.OA.1 Write an expression that correctly shows the difference of 19 twelves and 17 twelves.

$(19 \times 12) - (17 \times 12)$

10. 5.NBT.5 What is the product of 634 and 49?

1 1
3 3
634
x 49
5706
25360
31,066

11. Find the product of 6,243 and 53.

5.NBT.5

6243
x 53
18729
312150
330879

12. What would be a reasonable estimate for the product of 6,243 and 53?

5.NBT.5

6000 x 50
300,000

13. Without finding the values, write a sentence that compares the values of Expression G and Expression K.

5.OA.2

Expression G: 4,632 - 524
Expression K: 3 x (4,632 - 524)

$4{,}632 - 524 < 3 \times (4{,}632 - 524)$

14. Write more than one expression that represents 14 added to the product of 2 and 7?

5.OA.1

$14 + (2 \times 7)$ $14 + (7 \times 2)$
$(2 \times 7) + 14$
$(7 \times 2) + 14$

15. Which expression(s) has (have) a value of 14? Select all that apply.

5.OA.1

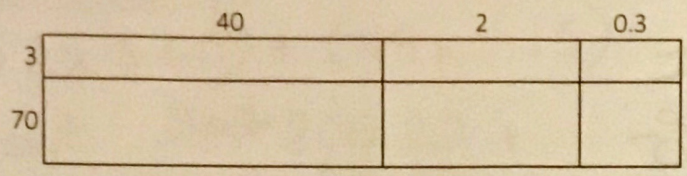
A. $(12 - 6) \div 2 \times 4$ $6 \div 2 \times 4 = 3 \times 4 = 12$
(B.) $(9 \times 7) - (7 \times 7)$ $2 \times 7 = 14$
C. $10 + (11 \times 2) - 7$ $10 + 22 - 7 = 32 - 7 = 25$
D. $12 + 5 \times (8 - 6)$ $12 + 5 \times 2 = 12 + 10 = 22$
(E.) $(12 - 10) \times (8 + 2) - 6$ $2 \times 10 - 6 = 20 - 6 = 14$
F. $2 \times (3 \times 4 + 3) - 6$ $2 \times (12 + 3) - 6 = 2 \times 15 - 6 = 30 - 6 = 24$

16. At the store, all customers were given a book of coupons as they entered the store in one weekend. If each book of coupons holds 13 coupons and there were a total of 524 customers who entered the store, how many coupons were given in all?

5.NBT.5

524
x 13
1572
5240
6,812

17. The model below can be used to find the value of which expression(s)?
5.NBT.7



A. 4.23 x 73

B. (70 + 3) x (40 + 2 + 0.3)

C. (70 x 3) + (40 x 2 x 0.3)

D. 73 x 423

E. 42.3 x 73

18. A roller coaster has 4 sections that each hold a maximum of 15 people. If the ride is filled to capacity for every ride, how many total people will have ridden the roller coaster after 144 rides?
5.NBT.5

$4 \times 15 = 60$

$60 \times 144 = 8{,}640$

$^{2}\,^{2}$
144
$\times 60$
8640

8,640 people will have ridden the roller coaster.

19. Simplify the expression below.
5.OA.1

$5 + 4 \times (14 - 8)$

$5 + 4 \times 6$

$5 + 24$

29

20. Mary carried one box that weighed 10.5 pounds and another box that weighed 7 pounds into her new house. How many ounces do both boxes weigh altogether?
5.MD.1

$10.5 + 7 = 17.5$

1 lb = 16 oz

17.5 lb = 17.5 x 16

17.5 lb = 280 oz

$^{4\,3}$
17.5
$\times 16$
1050
1750
28.00

21. Mandy has walked her dog every day for 3 weeks. If she walks her dog every day for one more week, how many total days will she have walked her dog altogether?
5.MD.1

1 week = 7 days

4 weeks = 4 x 7 days

4 weeks = 28 days