Name:_____Date:_____

Mid-Module 3 Review Sheet

1) Draw an area model to solve the following. Find the value of the following expressions.

a) 40 x 80

b) 4 x 273

2) Use any place value strategy to multiply.

a) 5 x 46

b) 3 x 429

c) 6 x 1,609

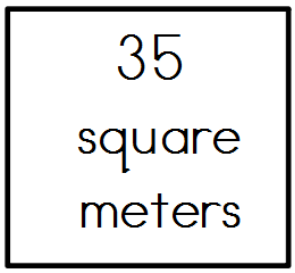
d) 3,634 x 6

Solve using a model or equation. Show your work and write your answer as a statement.

3) Northern Elementary School has a field with an area of 35 square meters. The length of the field is 7 meters. The field at Southern Elementary School is four times as long and two times as wide.

a) What is the width of Northern Elementary School's field? Then, draw and label the measurements of the field at Southern Elementary School.

Northern Elementary School Field



b) What is the area of the field at Southern Elementary School?

c) The two schools want to put up a fence around their fields. How many more meters of fencing will Southern Elementary need than Northern Elementary?

d) Northern Elementary School has a sandbox that measures 3 yards by 12 yards on their field. The dimensions of Southern Elementary School's sandbox are twice as large. What is the area of Southern Elementary School's sandbox? Write a multiplication equation to solve. Assess the reasonableness of your answer.

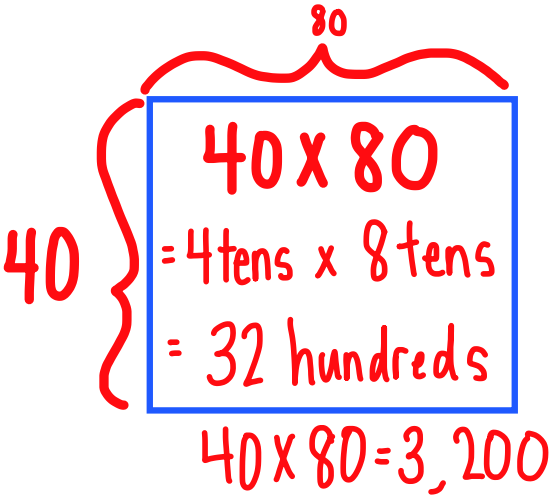
4) Mrs. Ellis orders new pens and pencils for her classes. She orders 8 boxes of pens with 63 pens in each box. She orders 7 boxes of pencils with 112 pencils in each box. How many new pens and pencils will Mrs. Ellis order? Is your answer reasonable? Explain.

5) The Bakery baked oatmeal cookies on a pan that holds 8 rows of 13 cookies. They then baked four times the amount of chocolate chip cookies as oatmeal cookies. How many oatmeal and chocolate chip cookies will the bakery have?

Mid-Module 3 Review Sheet ANSWER KEY

1) Draw an area model to solve the following. Find the value of the following expressions.

a) 40 x 80 = 3,200



40 x 80 = 3,200

b) 4 x 273 = 1,092

4	200	70	3
	800	280	12

x 273
4
(4x3) → 12
(4x70) → 280
(4x200) → 800
1,092

2) Use any place value strategy to multiply.

a) 5 x 46

+3
x 46
5
230

or

x 46
5
+ 30
+ 200
230

b) 3 x 429

x 429
3
+ 27
60
1200
1287

c) 6 x 1,609

x 1609
6
54
+ 00
3600
6000
9,654

d) 3,634 x 6

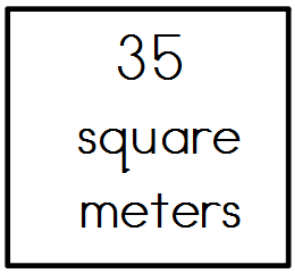
x 3634
6
24
180
+ 3600
18000
21,804

Solve using a model or equation. Show your work and write your answer as a statement.

3) Northern Elementary School has a field with an area of 35 square meters. The length of the field is 7 meters. The field at Southern Elementary School is four times as long and two times as wide.

a) What is the width of Northern Elementary School's field? Then, draw and label the measurements of the field at Southern Elementary School.

Northern Elementary School Field



7 meters

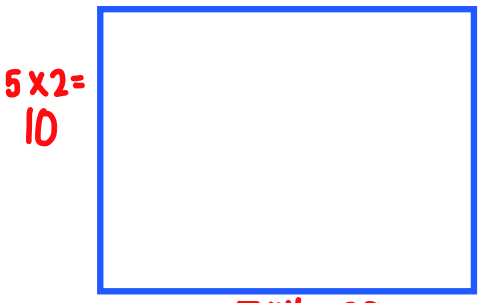
$A = L \times W$

$35 = 7 \times W$

$35 = 7 \times 5$

$W = 5m$

Southern



b) What is the area of the field at Southern Elementary School?

$A = L \times W$

$A = 28 \times 10$

$A = 280 \text{ meters}^2$

c) The two schools want to put up a fence around their fields. How many more meters of fencing will Southern Elementary need than Northern Elementary?

Northern

$P = S+S+S+S$

$P = 7+7+5+5$

$P = 14+10$

$P = 24m$

Southern

$P = S+S+S+S$

$P = 28+28+10+10$

$P = 56+20$

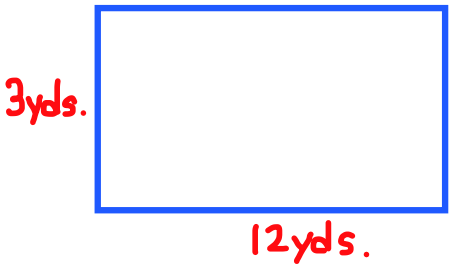
$P = 76m$

$76 - 24 = 52$

Southern will need 52 more meters than Northern.

d) Northern Elementary School has a sandbox that measures 3 yards by 12 yards on their field. The dimensions of Southern Elementary School's sandbox are twice as large. What is the area of Southern Elementary School's sandbox? Write a multiplication equation to solve. Assess the reasonableness of your answer.

Northern



$A = L \times W$

$= 3 \times 12$

$= 36\ yd^2$

Southern

$A = L \times W$

$= 24 \times 6$

$= 144\ yd^2$

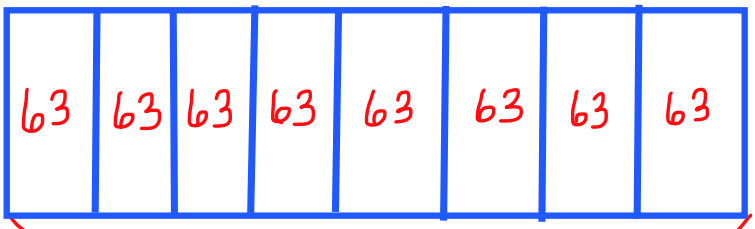
Reasonableness:

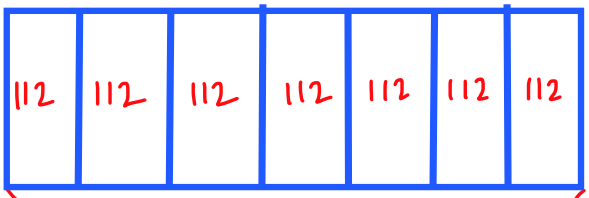
$24 \times 6 \approx 25 \times 6$

$\approx 150\ yd^2$

The area of Southern Elementary Schools sandbox is 144 yd^2. It is reasonable because 144 is very close to the estimate of 150 yd^2.

4) Mrs. Ellis orders new pens and pencils for her classes. She orders 8 boxes of pens with 63 pens in each box. She orders 7 boxes of pencils with 112 pencils in each box. How many new pens and pencils will Mrs. Ellis order? Is your answer reasonable? Explain.





63x8=504

60 x 8 = 480
110 x 7 = 770
1,250

784
+ 504
1288

7x112=
784

The answer is reasonable because 1,288 is close to the estimate of 1,250 pens and pencils.

5) The Bakery baked oatmeal cookies on a pan that holds 8 rows of 13 cookies. They then baked four times the amount of chocolate chip cookies as oatmeal cookies. How many oatmeal and chocolate chip cookies will the bakery have?

x 13
8
104
(oatmeal)

x 104
4
416
(Choc. Chip)

+ 416
104
520

8x13

Oatmeal | 104

Choc. Chip | 104 | 104 | 104 | 104

104x4