Name: Key Block: _____

Assessment 1 Review
(No Calculator)

6.NS.1 Multiplying and Dividing Fractions

1. Calculate. Show all work.

$\frac{1}{2}+\frac{5}{8}$

$\frac{4}{8}+\frac{5}{8}=\frac{9}{8}$ OR $1\frac{1}{8}$

$\frac{4}{5}+\frac{1}{7}$

$\frac{28}{35}+\frac{5}{35}=\frac{33}{35}$

$\frac{1}{3}-\frac{1}{4}$

$\frac{4}{12}-\frac{3}{12}=\frac{1}{12}$

$\frac{5}{1}\times\frac{2}{5}=\frac{10}{5}=2$

$\frac{1}{7}\times 2\frac{2}{3}$

$\frac{1}{7}\times\frac{8}{3}=\frac{8}{21}$

$\frac{7}{1}\div\frac{1}{3}$

$\frac{7}{1}\times\frac{3}{1}=\frac{21}{1}=21$

$\frac{1}{3}\div\frac{2}{3}$

$\frac{1}{3}\times\frac{3}{2}=\frac{3}{6}=\frac{1}{2}$

$\frac{7}{8}\div\frac{3}{1}$

$\frac{7}{8}\times\frac{1}{3}=\frac{7}{24}$

$\frac{5}{6}\div\frac{1}{4}$

$\frac{5}{6}\times\frac{4}{1}=\frac{20}{6}=\frac{10}{3}$ OR $3\frac{1}{3}$

2. An area in your backyard is 3/4 square kilometer. If the length is 2/5 km, what is the width? Use mathematics and/or a visual representation to show your work.

$\frac{3}{4}\div\frac{2}{5}=\frac{3}{4}\times\frac{5}{2}=\frac{15}{8}$ OR $1\frac{7}{8}$ km

3. Ms. Berman buys candy for 4 classes of students. If each class eats $\frac{3}{5}$ of a pound of candy, how much candy was eaten total (in pounds)? Use mathematics and/or a visual representation to show your work.

$\frac{4}{1}\times\frac{3}{5}=\frac{12}{5}$ OR $2\frac{2}{5}$ lbs.

4. Mike has $\frac{3}{4}$ of a pan of brownies to divide evenly among 8 people. How much of the original pan of brownies will each person get? Use mathematics and/or a visual representation to explain how you solved the problem.

$\frac{3}{4} \div \frac{8}{1} = \frac{3}{4} \times \frac{1}{8} = \frac{3}{32}$

5. David has $\frac{9}{10}$ yd. of wood and wants to make some birdhouses for a party. If each birdhouse requires $\frac{1}{5}$ yd of wood, how many birdhouses can he make? Use mathematics and/or a visual representation to show your work.

$\frac{9}{10} \div \frac{1}{5} = \frac{9}{10} \times \frac{5}{1} = \frac{45}{10} = \frac{9}{2} = 4\frac{1}{2}$ birdhouses

6. How wide is a rectangular carpet square with a length of 2 ½ feet and an area of 3 ¾ square feet? Use mathematics and/or a visual representation to show your work.

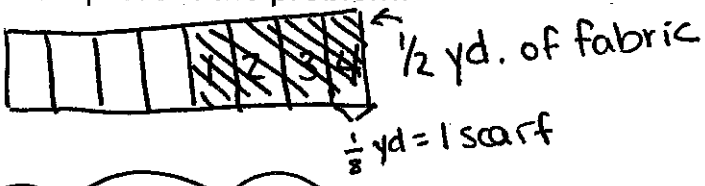
$3\frac{3}{4} \div 2\frac{1}{2} = \frac{15}{4} \div \frac{5}{2} = \frac{15}{4} \times \frac{2}{5} = \frac{30}{20} = \frac{3}{2}$ OR $1\frac{1}{2}$ ft.

7. Karlie buys $3\frac{7}{8}$ lbs. of candy to serve at a party. If each serving is gets ¼ lb. of candy, how many servings will Karlie have? Use mathematics and/or a visual representation to show your work.

$3\frac{7}{8} \div \frac{1}{4} = \frac{31}{8} \times \frac{4}{1} = \frac{124}{8} = 15\frac{4}{8} = 15\frac{1}{2}$ servings

8. Mary has 1/2 yard of fabric to make scarves. Each scarf uses 1/8 yards of fabric. How many scarves can Mary make?

a. Draw a visual to represent the problem:



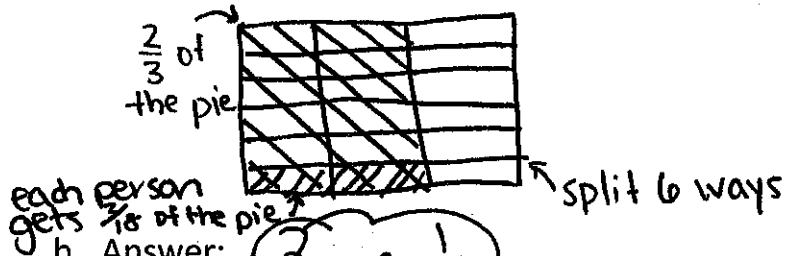
b. Answer: 4 scarves

c. What mathematical problem did you solve?

$\frac{1}{2} \div \frac{1}{8} = 4$

9. Shane has 2/3 of an apple pie. He wants to split it between his 6 friends. How much pie does each person get?

a. Draw a visual to represent the problem:



b. Answer: $\frac{2}{18}$ OR $\frac{1}{9}$

c. What mathematical problem did you solve? $\frac{2}{3} \div 6 = \frac{1}{9}$

6.NS.2 Standard Algorithm for Division

10. Compute using the standard algorithm:

a) $16\overline{)1968}$

123
-16↓
36
-32↓
48
-48
0

123

b) $14\overline{)329.0}$ (OR $23\frac{7}{14} = 23\frac{1}{2}$)

23.5
-28↓
49
-42↓
70
-70
0

23.5 OR $23\frac{1}{2}$

c) $17\overline{)28475}$

1675
-17↓
114
-102↓
127
-119
85
-85
0

1675

d) $7031 \div 16 =$

439
16)7031
-64↓
63
-48↓
151
-144
7

$439\frac{7}{16}$

$439\frac{7}{16}$

e) $5434 \div 26 =$

209
26)5434
-52↓↓
234
-234
0

209

f) $8188 \div 23 =$

356
23)8188
-69↓
128
-115↓
138
-138
0

356

6.NS.3 Adding, Subtracting, Multiplying, and Dividing Decimals

11. You are charged $3.60 for an overdue library book. If the late fee is $0.45 per day, how many days was your book overdue? **Show how you determined your answer.**

0.45 ⟌ 3.60

45 ⟌ 360. → 8. (−360, 0)

3.60 ÷ .45 =

8 days

12. A rectangle has a length of 2.8 cm and a width of 4.1 cm. Use the formula **A=LxW** to determine the area of the rectangle. **Show your work.**

2.8 × 4.1 = 28 + 1120 = 11.48 cm²

13. One pound of chocolate costs $2.15. To the nearest cent, how much will 3.8 pounds of chocolate cost? **Show how you determined your answer.**

2.15 × 38 = 1720 + 6450 = 8.170

$8.17

14. Dale is 149.213 centimeters tall, and Charlie is 151.2 centimeters tall. What is the difference in their heights? **Show how you determined your answer.**

151.2 − 149.213 = 1.987 cm

15. Ms. Berman presents this problem to the class: 64.57 ÷ 100

Ashley says that the quotient is 0.6457. Spencer says that the quotient is 6,457. Who is correct? Explain how you know.

Ashley - dividing by 100 will make 64.57 smaller.

16. Use the standard algorithm for multiplication to find the product of 9.7 and 5.2. Show how you determined your answer.

9.7 × 5.2 = 194 + 4850 = 50.44