

## Math 5th Grade Benchmark Assessment 2

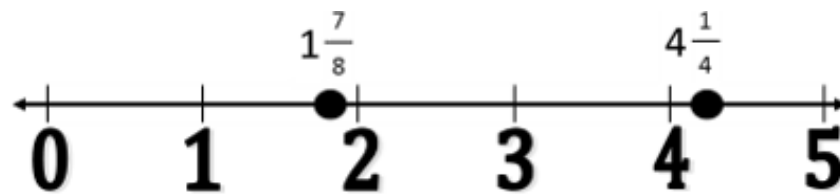
5.NF.1, 5.NF.2, 5.NF.3, 5.NF.4, 5.NF.5, 5.NF.6, 5.NF.7

#	Standard	Question
1	5.NF.2	<p>The cafeteria served pizza for lunch to three fifth grade classes. The cafeteria made 18 pizzas to be shared by the three classes.</p> <p>Ms. Hill's class ate <math>5\frac{1}{2}</math> pizzas.</p> <p>Mr. Jones's class ate <math>7\frac{3}{4}</math> pizzas.</p> <p>How much pizza was left for Ms. Barnette's class?</p> <p>A <math>4\frac{3}{4}</math></p> <p>B <math>5\frac{3}{4}</math></p> <p>C <math>12\frac{3}{4}</math></p> <p>D <math>13\frac{1}{4}</math></p>

2

5.NF.1

How far apart are the two points on this number line?



A  $2\frac{1}{2}$

B  $2\frac{2}{8}$

C  $2\frac{3}{8}$

D  $2\frac{2}{12}$

3

5.NF.1

The models shown are shaded to represent two mixed numbers.

**Model 1**



**Model 2**



What is the sum of these two mixed numbers?

A  $5\frac{3}{5}$

B  $5\frac{3}{10}$

C  $4\frac{3}{3}$

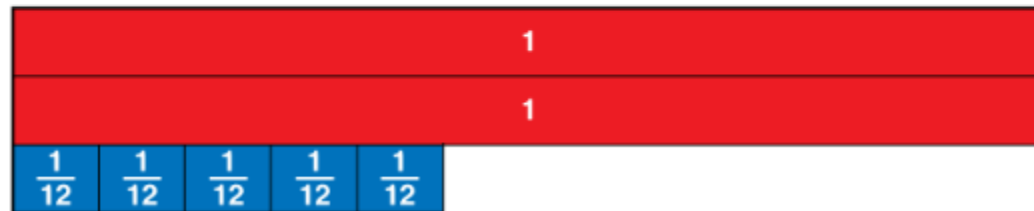
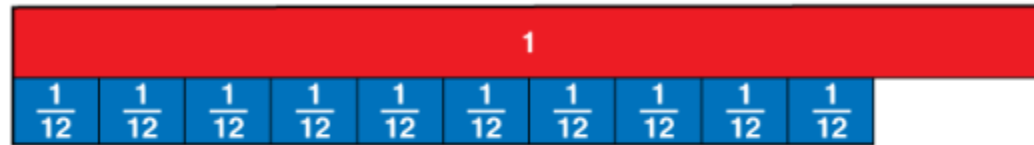
D  $5\frac{3}{15}$

4	5.NF.2	<p>A recipe for trail mix calls for</p> <p><math>2\frac{3}{4}</math> cups of peanuts,</p> <p><math>1\frac{2}{3}</math> cups of cashews, and</p> <p><math>1\frac{1}{6}</math> cups of almonds.</p> <p>How many cups of nuts are used in all?</p> <p>A <math>4\frac{5}{12}</math> cups</p> <p>B <math>4\frac{7}{12}</math> cups</p> <p>C <math>5\frac{5}{12}</math> cups</p> <p>D <math>5\frac{7}{12}</math> cups</p>
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5

5.NF.2

Models for two mixed numbers are shown below.  
Which shows the correct sum?



A  $3\frac{10}{18} = 3\frac{5}{9}$

B  $3\frac{15}{24} = 3\frac{5}{8}$

C  $4\frac{3}{15} = 4\frac{1}{5}$

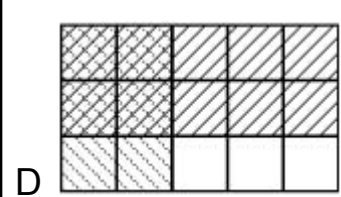
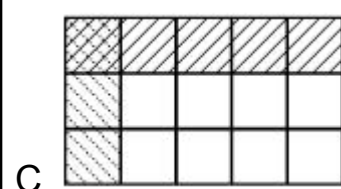
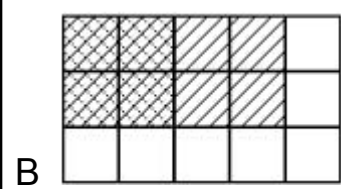
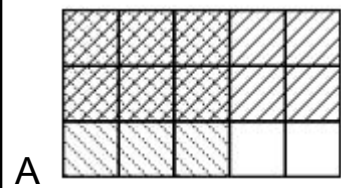
D  $4\frac{3}{12} = 4\frac{1}{4}$

6

5.NF.4

Which model best represents this multiplication equation?

$$\frac{2}{5} \times \frac{2}{3} = \square$$



7

5.NF.7

Josh has  $\frac{1}{4}$  gallon of orange juice.

He wants to share it equally between two friends and himself.

How much orange juice will each person drink?

A  $\frac{1}{12}$  gallon

B  $\frac{1}{8}$  gallon

C  $\frac{1}{3}$  gallon

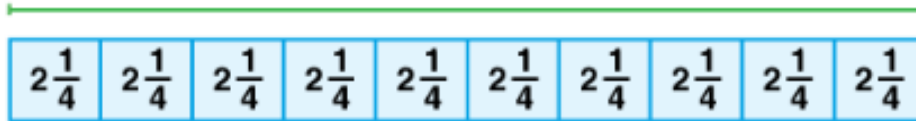
D  $\frac{3}{4}$  gallon

8

5.NF.6

A recipe uses  $2\frac{1}{4}$  cups of flour for a batch of cookies.  
Henry makes 10 batches of cookies for a bake sale.

**c total cups**

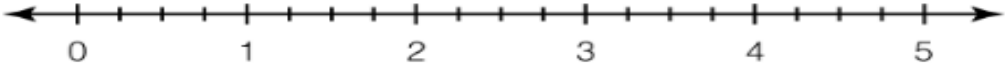


How many cups of flour does Henry need?

- A  $20\frac{1}{4}$  cups
- B  $22\frac{1}{2}$  cups
- C  $24\frac{3}{4}$  cups
- D  $25\frac{1}{2}$  cups



9	5.NF.4	<p>For which equations does the fraction <math>\frac{2}{3}</math> make the equation true?</p> <p>Choose all that apply.</p> <p><input type="checkbox"/> A <math>35 \times \square = 20</math></p> <p><input type="checkbox"/> B <math>26 \times \square = 18\frac{1}{3}</math></p> <p><input type="checkbox"/> C <math>48 \times \square = 32</math></p> <p><input type="checkbox"/> D <math>22 \times \square = 14\frac{2}{3}</math></p>
10	5.NF.5	<p>Without multiplying, decide which symbol to use: greater than <math>&gt;</math>, less than <math>&lt;</math>, or equals <math>=</math>.</p> <p><math>2\frac{1}{3} \times 1\frac{4}{9} \square 1\frac{4}{9}</math></p> <p>A <math>&gt;</math></p> <p>B <math>&lt;</math></p> <p>C <math>=</math></p>

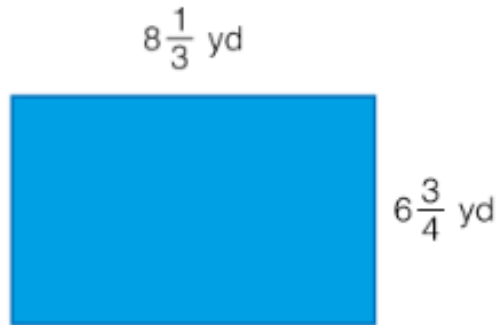
11	5.NF.6	<p>The distance around one block in Ava's neighborhood is <math>\frac{3}{4}</math> mile.</p> <p>If Ava rides her bike around the block 5 times, how many miles does she ride?</p> <p>Use the number line to help.</p>  <p>A <math>3\frac{3}{4}</math> miles</p> <p>B <math>4\frac{1}{4}</math> miles</p> <p>C 5 miles</p> <p>D <math>5\frac{3}{4}</math> miles</p>
12	5.NF.5	<p>Without multiplying, decide which symbol to use: greater than <math>&gt;</math>, less than <math>&lt;</math>, or equals <math>=</math>.</p> <p><math>\frac{1}{7} \times 2\frac{6}{7}</math> <input type="checkbox"/> <math>2\frac{6}{7}</math></p> <p>A <math>&gt;</math></p> <p>B <math>&lt;</math></p> <p>C <math>=</math></p>

13	5.NF.3	<p>For which equations does the number 2 make the equation true? Choose all that apply.</p> <p><input type="checkbox"/> A <math>1 \div 2 = \square</math></p> <p><input type="checkbox"/> B <math>5 \div \square = \frac{2}{5}</math></p> <p><input type="checkbox"/> C <math>\square \div 9 = \frac{2}{9}</math></p> <p><input type="checkbox"/> D <math>1 \div \square = \frac{1}{2}</math></p>
14	5.NF.3	<p>Brandi has to deliver a message to a friend who lives 14 miles away. She can deliver the message to Jake who then delivers it to Marissa. Marissa delivers it to Kelly who then finishes the delivery. Each of the four friends walks the message the same distance.</p> <p>How far does each friend travel with the message?</p> <p>A 3 miles</p> <p>B <math>3\frac{1}{2}</math> miles</p> <p>C 4 miles</p> <p>D <math>5\frac{1}{2}</math> miles</p>

15

5.NF.4

The Becks buy a plastic tarp to cover their firewood.



What is the actual area of the tarp?

- A  $48\frac{1}{4}$  sq yd
- B  $50\frac{3}{4}$  sq yd
- C  $54\frac{1}{3}$  sq yd
- D  $56\frac{1}{4}$  sq yd

16

5.NF.7

Choose all of the expressions that are equal to  $\frac{1}{8}$ .

A  $8 \div 1$

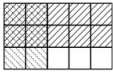
B  $2 \div 16$

C  $2 \div \frac{1}{4}$

D  $1 \times 8$

E  $\frac{1}{4} \div 2$

## Answer Key

#	Standard	Answer	#	Standard	Answer
1	5.NF.2	A $4\frac{3}{4}$	9	5.NF.4	C $48 \times \square = 32$ , D $22 \times \square = 14\frac{2}{3}$
2	5.NF.1	C $2\frac{3}{8}$	10	5.NF.5	A >
3	5.NF.1	B $5\frac{3}{10}$	11	5.NF.6	A $3\frac{3}{4}$ miles
4	5.NF.2	D $5\frac{7}{12}$ cups	12	5.NF.5	B <
5	5.NF.2	D $4\frac{3}{12} = 4\frac{1}{4}$	13	5.NF.3	C $\square \div 9 = \frac{2}{9}$ , D $1 \div \square = \frac{1}{2}$
6	5.NF.4	D 	14	5.NF.3	B $3\frac{1}{2}$ miles
7	5.NF.7	A $\frac{1}{12}$ gallon	15	5.NF.4	D $56\frac{1}{4}$ sq yd
8	5.NF.6	B $22\frac{1}{2}$ cups	16	5.NF.7	B $2 \div 16$ , E $\frac{1}{4} \div 2$