



HAY

How much hay did Kate's horses eat this week?

Country girl Kate uses a weekly food log to keep a close eye on the amount of hay her horses actually eat. If healthy, each of her adult horses (Thunder, Knight, Will & Big Boy) will eat between $4\frac{1}{2}$ and 5 bales of hay each week. If a horse eats any less than that, Kate checks in on them to see if they might be sick.

How much did each horse eat?

Which horse(s) should Kate check for sickness?

5.NF.A.1

About this standard

Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example: $\frac{2}{3} + \frac{5}{4} = \frac{8}{12} + \frac{15}{12} = \frac{23}{12}$. (In general, $\frac{a}{b} + \frac{c}{d} = \frac{ad + bc}{bd}$).

WEEKLY FEED LOG				
	Thunder	Knight	Will	Big Boy
Sunday	$\frac{2}{3}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$
Monday	$\frac{2}{3}$	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{3}{4}$
Tuesday	$\frac{3}{4}$	$\frac{1}{2}$	$\frac{2}{3}$	$\frac{1}{2}$
Wednesday	$\frac{2}{3}$	$\frac{3}{8}$	$\frac{3}{4}$	$\frac{1}{2}$
Thursday	$\frac{1}{2}$	$\frac{3}{4}$	$\frac{2}{3}$	$\frac{3}{4}$
Friday	$\frac{3}{4}$	$\frac{2}{3}$	$\frac{2}{3}$	$\frac{1}{2}$
Saturday	$\frac{3}{4}$	$\frac{3}{8}$	$\frac{1}{2}$	$\frac{3}{8}$
TOTAL	$4\frac{3}{4}$	$4\frac{1}{6}$	$4\frac{1}{2}$	$4\frac{1}{8}$

Kate should check:

Thunder

Knight

Will

Big Boy

APPLYING THE STANDARD

Here is how similar problems might look on a test.

To add or subtract fractions, it is sometimes necessary to replace the given fractions with equivalent fractions that have a common denominator.

For each set of fractions, write equivalent replacement fractions with a common denominator.

1) $\frac{3}{5}$ $\frac{1}{4}$

$\frac{12}{20}$ $\frac{5}{20}$

2) $\frac{5}{6}$ $\frac{1}{3}$

$\frac{5}{6}$ $\frac{2}{6}$

3) $\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{5}$

$\frac{15}{30}$ $\frac{10}{30}$ $\frac{6}{30}$

4) $\frac{2}{3}$ $\frac{3}{4}$ $\frac{1}{6}$

$\frac{8}{12}$ $\frac{9}{12}$ $\frac{2}{12}$

Find the sum or difference.

Answers may vary.

5) $\frac{5}{7} - \frac{2}{3}$

$\frac{1}{21}$

6) $3\frac{1}{4} + 3\frac{5}{8}$

$6\frac{7}{8}$

7) $10\frac{3}{10} + \frac{1}{5}$

$10\frac{1}{2}$

8) $4\frac{1}{3} - 1\frac{1}{2}$

$2\frac{5}{6}$

9) Tony is $11\frac{1}{2}$ years old. His little brother, Sean, is $8\frac{5}{12}$ years old. How much older is Tony than Sean?

$3\frac{1}{12}$ years

10) Trina opened a new box of cereal. She ate $2\frac{1}{2}$ cups of cereal and her dad ate $3\frac{3}{4}$ cups. If the new box had 11 cups, how much cereal is left in the box?

$4\frac{3}{4}$ cups

USAIN BOLT vs. THE CHEETAH

The world's fastest man, Usain Bolt, can run 100 meters in $9\frac{3}{5}$ seconds. The cheetah can run the same distance in $6\frac{1}{10}$ seconds.

How much faster is the cheetah than Usain Bolt?

The cheetah is $3\frac{1}{2}$ seconds faster than Usain Bolt.

