RIDDLE: What Happens To A Dog Who Eats Table Scraps?

Make the one-color trains for (orange & brown). Solve the following addition and subtraction pro lems by using the family name (common denominator). Express all final answers in lowest term Match each answer with the given letter to solve the riddle.

Add

1) $\frac{1}{2} = \bigcirc$
$+ \frac{5}{18} = \bigcirc$
_____
$\bigcirc$ or $\bigcirc$ **G**

2) $\frac{1}{2} = \bigcirc$
$+ \frac{4}{9} = \bigcirc$
_____
$\bigcirc$ **P**

3) $\frac{5}{6} = \bigcirc$
$+ \frac{1}{18} = \bigcirc$
_____
$\bigcirc$ or $\bigcirc$ **T**

4) $\frac{4}{9} = \bigcirc$
$+ \frac{1}{6} = \bigcirc$
_____
$\bigcirc$ **N**

5) $\frac{2}{9} = \bigcirc$
$+ \frac{5}{18} = \bigcirc$
_____
$\bigcirc$ or $\bigcirc$ **E**

6) $\frac{1}{6} = \bigcirc$
$+ \frac{7}{18} = \bigcirc$
_____
$\bigcirc$ or $\bigcirc$ **R**

Subtract

7) $\frac{8}{9} = \bigcirc$
$- \frac{1}{2} = \bigcirc$
_____
$\bigcirc$ **H**

8) $\frac{5}{6} = \bigcirc$
$- \frac{2}{3} = \bigcirc$
_____
$\bigcirc$ or $\bigcirc$ **I**

9) $\frac{1}{2} = \bigcirc$
$- \frac{4}{9} = \bigcirc$
_____
$\bigcirc$ **S**

10) $\frac{2}{3} = \bigcirc$
$- \frac{7}{18} = \bigcirc$
_____
$\bigcirc$ **U**

11) $\frac{5}{6} = \bigcirc$
$- \frac{1}{9} = \bigcirc$
_____
$\bigcirc$ **L**

12) $\frac{11}{18} = \bigcirc$
$- \frac{1}{2} = \bigcirc$
_____
$\bigcirc$ or $\bigcirc$ **O**

Riddle Answer

$\frac{7}{18}$	$\frac{1}{2}$

$\frac{7}{9}$	$\frac{1}{2}$	$\frac{8}{9}$	$\frac{1}{18}$

$\frac{1}{18}$	$\frac{17}{18}$	$\frac{13}{18}$	$\frac{1}{6}$	$\frac{11}{18}$	$\frac{8}{9}$	$\frac{1}{2}$	$\frac{5}{9}$	$\frac{1}{18}$

$\frac{1}{6}$	$\frac{11}{18}$

$\frac{7}{18}$	$\frac{1}{6}$	$\frac{1}{18}$

$\frac{8}{9}$	$\frac{1}{9}$	$\frac{11}{18}$	$\frac{7}{9}$	$\frac{5}{18}$	$\frac{1}{2}$

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RIDDLE: What Has A Foot At Each End And A Foot In The Middle?

w	w	w	w	w	w	w	w	w	w	w	w

orange	red

dark green	dark green

purple	purple	purple

green	green	green	green

red	red	red	red	red	red

Cover the diagram to show fractional parts of (orange & red). Solve the following addition and subtraction problems by using the family name (common denominator). Express all final answers in lowest terms. Match each answer with the given letter to solve the riddle.

1) $\frac{5}{12} = \bigcirc$
$+ \frac{1}{4} = \bigcirc$
——————— D
$\bigcirc$ or $\bigcirc$

2) $\frac{1}{4} = \bigcirc$
$- \frac{1}{6} = \bigcirc$
——————— I
$\bigcirc$

3) $\frac{1}{4} = \bigcirc$
$+ \frac{1}{6} = \bigcirc$
——————— T
$\bigcirc$

4) $\frac{5}{6} = \bigcirc$
$- \frac{1}{4} = \bigcirc$
——————— C
$\bigcirc$

5) $\frac{2}{3} = \bigcirc$
$+ \frac{1}{4} = \bigcirc$
——————— Y
$\bigcirc$

6) $\frac{5}{12} = \bigcirc$
$- \frac{1}{4} = \bigcirc$
——————— K
$\bigcirc$ or $\bigcirc$

7) $\frac{1}{12} = \bigcirc$
$+ \frac{1}{6} = \bigcirc$
——————— S
$\bigcirc$ or $\bigcirc$

8) $\frac{5}{6} = \bigcirc$
$- \frac{1}{2} = \bigcirc$
——————— R
$\bigcirc$ or $\bigcirc$

9) $\frac{2}{3} = \bigcirc$
$+ \frac{1}{12} = \bigcirc$
——————— A
$\bigcirc$ or $\bigcirc$

Riddle Answer

$\frac{3}{4}$		$\frac{11}{12}$	$\frac{3}{4}$	$\frac{1}{3}$	$\frac{2}{3}$	$\frac{1}{4}$	$\frac{5}{12}$	$\frac{1}{12}$	$\frac{7}{12}$	$\frac{1}{6}$

RIDDLE: What's The Difference Between An Angry Rabbit And A Counterfeit $10 Bill?

Make all the one-color trains for (orange & brown). Use these trains to help solve the following problems. Match the letter given with each answer to solve the riddle. All answers have been expressed using the family name, eighteenths.

1) $\frac{1}{2} - \frac{1}{9} =$ ⬡ Y

2) $\frac{1}{2} - \frac{1}{18} =$ ⬡ A

3) $\frac{1}{3} - \frac{1}{9} =$ ⬡ T

4) $\frac{1}{3} - \frac{1}{18} =$ ⬡ O

5) $\frac{1}{6} - \frac{1}{9} =$ ⬡ N

6) $\frac{2}{3} - \frac{1}{9} =$ ⬡ M

7) $\frac{2}{3} - \frac{1}{18} =$ ⬡ B

8) $\frac{5}{6} - \frac{1}{9} =$ ⬡ S

9) $\frac{5}{6} - \frac{1}{18} =$ ⬡ I

10) $\frac{8}{9} - \frac{1}{18} =$ ⬡ U

11) $\frac{7}{9} - \frac{2}{3} =$ ⬡ H

12) $\frac{4}{9} - \frac{5}{18} =$ ⬡ E

13) $\frac{1}{2} - \frac{1}{6} =$ ⬡ R

14) $1 - \frac{1}{18} =$ ⬡ D

Riddle Answer

| $\frac{5}{18}$ | $\frac{1}{18}$ | $\frac{3}{18}$ | | $\frac{14}{18}$ | $\frac{13}{18}$ | | $\frac{8}{18}$ | | $\frac{10}{18}$ | $\frac{8}{18}$ | $\frac{17}{18}$ | | $\frac{11}{18}$ | $\frac{15}{18}$ | $\frac{1}{18}$ | $\frac{1}{18}$ | $\frac{7}{18}$ | | $\frac{8}{18}$ | $\frac{1}{18}$ | $\frac{17}{18}$ |

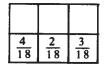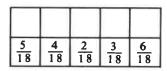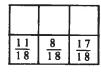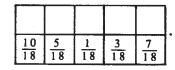| $\frac{4}{18}$ | $\frac{2}{18}$ | $\frac{3}{18}$ | | $\frac{5}{18}$ | $\frac{4}{18}$ | $\frac{2}{18}$ | $\frac{3}{18}$ | $\frac{6}{18}$ | | $\frac{14}{18}$ | $\frac{13}{18}$ | | $\frac{11}{18}$ | $\frac{8}{18}$ | $\frac{17}{18}$ | | $\frac{10}{18}$ | $\frac{5}{18}$ | $\frac{1}{18}$ | $\frac{3}{18}$ | $\frac{7}{18}$ |

RIDDLE: What Has One Horn, Runs Up And Down The Street, And Gives Milk?

w	w	w	w	w	w	w	w	w	w	w	w	w	w	w

| orange | | | | | | | | | | yellow | | | | |

| yellow | | | | | yellow | | | | | yellow | | | | |

| green | | green | | green | | green | | green | | | | | | |

Cover the diagram to show the fractional parts of (orange & yellow). Solve the following addition problems by finding a common denominator. Put answers in lowest terms. Check all problems with rods. Match each answer with the letter to solve the riddle.

1) $\frac{1}{3} = $ ⬡
$+ \frac{1}{5} = $ ⬡
——————— R
⬡

2) $\frac{1}{3} = $ ⬡
$+ \frac{2}{5} = $ ⬡
——————— K
⬡

3) $\frac{2}{3} = $ ⬡
$+ \frac{1}{5} = $ ⬡
——————— A
⬡

4) $\frac{3}{5} = $ ⬡
$+ \frac{1}{3} = $ ⬡
——————— I
⬡

5) $\frac{1}{3} = $ ⬡
$+ \frac{1}{15} = $ ⬡
——————— L
⬡ or ⬡

6) $\frac{1}{5} = $ ⬡
$+ \frac{7}{15} = $ ⬡
——————— C
⬡ or ⬡

7) $\frac{4}{15} = $ ⬡
$+ \frac{1}{3} = $ ⬡
——————— T
⬡ or ⬡

8) $\frac{2}{5} = $ ⬡
$+ \frac{1}{15} = $ ⬡
——————— U
⬡

9) $\frac{2}{3} = $ ⬡
$+ \frac{2}{15} = $ ⬡
——————— M
⬡ or ⬡

Riddle Answer

| $\frac{13}{15}$ | | $\frac{4}{5}$ | $\frac{14}{15}$ | $\frac{2}{5}$ | $\frac{11}{15}$ | | $\frac{3}{5}$ | $\frac{8}{15}$ | $\frac{7}{15}$ | $\frac{2}{3}$ | $\frac{11}{15}$ |

RIDDLE: What's The Difference Between A Man Going Up The Stairs And A Man Looking Up The Stairs?

Make all the one-color trains for (orange & brown). Use these trains to help solve the following problems. Match the letter given with each answer to solve the riddle. All answers have been expressed using the family name, eighteenths.

1) $\frac{1}{2} + \frac{1}{3} =$ ⬡ N

2) $\frac{1}{2} + \frac{1}{9} =$ ⬡ P

3) $\frac{1}{9} + \frac{1}{6} =$ ⬡ E

4) $\frac{1}{3} + \frac{1}{18} =$ ⬡ A

5) $\frac{1}{6} + \frac{1}{18} =$ ⬡ S

6) $\frac{5}{6} + \frac{1}{9} =$ ⬡ H

7) $\frac{1}{2} + \frac{1}{6} =$ ⬡ R

8) $\frac{1}{2} + \frac{1}{18} =$ ⬡ U

9) $\frac{1}{3} + \frac{1}{9} =$ ⬡ I

10) $\frac{1}{6} + \frac{1}{3} =$ ⬡ O

11) $\frac{1}{9} + \frac{1}{18} =$ ⬡ T

12) $\frac{1}{2} + \frac{2}{9} =$ ⬡ D

Riddle Answer

$\frac{9}{18}$	$\frac{15}{18}$	$\frac{5}{18}$

$\frac{4}{18}$	$\frac{3}{18}$	$\frac{5}{18}$	$\frac{11}{18}$	$\frac{4}{18}$

$\frac{10}{18}$	$\frac{11}{18}$

$\frac{3}{18}$	$\frac{17}{18}$	$\frac{5}{18}$

$\frac{4}{18}$	$\frac{3}{18}$	$\frac{7}{18}$	$\frac{8}{18}$	$\frac{12}{18}$	$\frac{4}{18}$

$\frac{7}{18}$	$\frac{15}{18}$	$\frac{13}{18}$

$\frac{3}{18}$	$\frac{17}{18}$	$\frac{5}{18}$

$\frac{9}{18}$	$\frac{3}{18}$	$\frac{17}{18}$	$\frac{5}{18}$	$\frac{12}{18}$

$\frac{4}{18}$	$\frac{3}{18}$	$\frac{7}{18}$	$\frac{12}{18}$	$\frac{5}{18}$	$\frac{4}{18}$

$\frac{10}{18}$	$\frac{11}{18}$

$\frac{3}{18}$	$\frac{17}{18}$	$\frac{5}{18}$

$\frac{4}{18}$	$\frac{3}{18}$	$\frac{5}{18}$	$\frac{11}{18}$	$\frac{4}{18}$

RIDDLE I: What Coat Is Put On Only When Its Wet?

Make all the one-color trains for (orange & yellow). Use these trains to help solve the following problems. Match the letter given with each answer to solve the riddle. All answers have been expressed using the family name, fifteenths.

1) $\frac{1}{3} + \frac{1}{5} =$ ⬡ T

2) $\frac{1}{5} + \frac{1}{15} =$ ⬡ I

3) $\frac{2}{3} + \frac{1}{15} =$ ⬡ C

4) $\frac{3}{5} + \frac{1}{3} =$ ⬡ F

5) $\frac{1}{3} + \frac{1}{15} =$ ⬡ N

6) $\frac{2}{3} + \frac{1}{5} =$ ⬡ A

7) $\frac{2}{5} + \frac{1}{15} =$ ⬡ O

8) $\frac{4}{15} + \frac{2}{5} =$ ⬡ P

Riddle Answer

| $\frac{13}{15}$ | | $\frac{11}{15}$ | $\frac{7}{15}$ | $\frac{13}{15}$ | $\frac{8}{15}$ | | $\frac{7}{15}$ | $\frac{14}{15}$ | | $\frac{10}{15}$ | $\frac{13}{15}$ | $\frac{4}{15}$ | $\frac{6}{15}$ | $\frac{8}{15}$ |

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RIDDLE II: What Do You Say When You Call Your Dog And He Doesn't Come?

Make all the one-color trains for (orange & purple). Use these trains to help solve the following problems. Match the letter given with each answer to solve the riddle. All answers have been expressed using the family name, fourteenths.

1) $\frac{1}{2} + \frac{1}{7} =$ ⬡ N

2) $\frac{1}{7} + \frac{1}{14} =$ ⬡ E

3) $\frac{1}{2} + \frac{2}{7} =$ ⬡ O

4) $\frac{1}{2} + \frac{1}{14} =$ ⬡ G

5) $\frac{2}{7} + \frac{1}{14} =$ ⬡ D

6) $\frac{1}{2} + \frac{3}{7} =$ ⬡ !

Riddle Answer

| $\frac{5}{14}$ | $\frac{11}{14}$ | $\frac{8}{14}$ | $\frac{8}{14}$ | $\frac{11}{14}$ | $\frac{9}{14}$ | $\frac{3}{14}$ | $\frac{13}{14}$ |

RIDDLE: What Happens To Two Frogs Who Try To Catch The Same Bug At The Same Time?

Make all the one-color trains for (orange & dark green). Use these trains to help solve the following problems. Match the letter given with each answer to solve the riddle. All answers have been expressed using the family name, sixteenths.

1) $\frac{1}{2} + \frac{1}{8} = $ ⬡ U

2) $\frac{1}{2} + \frac{1}{16} = $ ⬡ E

3) $\frac{1}{4} + \frac{1}{16} = $ ⬡ U

4) $\frac{1}{2} + \frac{3}{8} = $ ⬡ O

5) $\frac{1}{2} + \frac{5}{16} = $ ⬡ Y

6) $\frac{1}{4} + \frac{3}{16} = $ ⬡ D

7) $\frac{1}{2} + \frac{1}{4} = $ ⬡ P

8) $\frac{1}{4} + \frac{1}{8} = $ ⬡ T

9) $\frac{1}{8} + \frac{1}{16} = $ ⬡ N

10) $\frac{1}{2} + \frac{3}{16} = $ ⬡ H

11) $\frac{5}{8} + \frac{5}{16} = $ ⬡ G

12) $\frac{1}{16} + \frac{7}{16} = $ ⬡ I

Riddle Answer

$\frac{6}{16}$	$\frac{11}{16}$	$\frac{9}{16}$	$\frac{13}{16}$

$\frac{9}{16}$	$\frac{3}{16}$	$\frac{7}{16}$

$\frac{5}{16}$	$\frac{12}{16}$

$\frac{6}{16}$	$\frac{14}{16}$	$\frac{3}{16}$	$\frac{15}{16}$	$\frac{10}{16}$	$\frac{9}{16}$

$\frac{6}{16}$	$\frac{8}{16}$	$\frac{9}{16}$	$\frac{7}{16}$