Date:_____

1 Which two fractions are equivalent to $\frac{2}{3}$?

(A) $\frac{10}{15}, \frac{16}{24}$ $\frac{10 \div 5}{15 \div 5} = \boxed{\frac{2}{3}}$ $\frac{16 \div 8}{24 \div 8} = \boxed{\frac{2}{3}}$

B $\frac{20}{30}, \frac{35}{45}$ $\frac{20 \div 10}{30 \div 10} = \boxed{\frac{2}{3}}$ $\frac{35 \div 5}{45 \div 5} = \boxed{\frac{7}{9}}$

C $\frac{14}{18}, \frac{25}{30}$ $\frac{14 \div 2}{18 \div 2} = \boxed{\frac{7}{9}}$ $\frac{25 \div 5}{30 \div 5} = \boxed{\frac{5}{6}}$

D $\frac{24}{30}, \frac{22}{33}$ $\frac{24 \div 6}{30 \div 6} = \boxed{\frac{4}{5}}$ $\frac{22 \div 11}{33 \div 11} = \boxed{\frac{2}{3}}$

2 Write the fraction in simplest form.

$\frac{12}{18}$

$\frac{12 \div 2}{18 \div 2} = \frac{6 \div 3}{9 \div 3} = \boxed{\frac{2}{3}}$

A $\frac{12}{18}$

B $\frac{4}{6}$

C $\frac{1}{6}$

(D) $\frac{2}{3}$

3 Which of the following is $\frac{16}{60}$ in simplest form?

A $\frac{3}{10}$

B $\frac{2}{5}$

(C) $\frac{4}{15}$

D $\frac{8}{30}$

$\frac{16 \div 2}{60 \div 2} = \frac{8 \div 2}{30 \div 2} = \boxed{\frac{4}{15}}$

4 There are 42 bananas in a bag. If Kanti takes out 7 of the bananas, what fraction of the bananas does she take out of the bag?

A $\frac{1}{42}$

B $\frac{1}{3}$

C $\frac{1}{7}$

(D) $\frac{1}{6}$

$$\frac{7 \div 7}{42 \div 7} = \frac{1}{6}$$

5 Write the fraction in simplest form.

$\frac{9}{12}$

A $\frac{1}{2}$

B $\frac{3}{6}$

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

D $\frac{5}{6}$

$$\frac{9 \div 3}{12 \div 3} = \frac{3}{4}$$

6 Which of the following pairs of numbers has a least common multiple of 40?

A 2 and 5
B 4 and 5
C 4 and 10
(D) 5 and 8

a. 2 = 2, 4, 6, 8, (10)
   5 = 5, (10)

b. 4 = 4, 8, 12, 16, (20)
   5 = 5, 10, 15, (20)

c. 4 = 4, 8, 12, 16, (20) 24, 28,
   10 = 32, 36, (40)
   ↳10, (20), 30, (40)

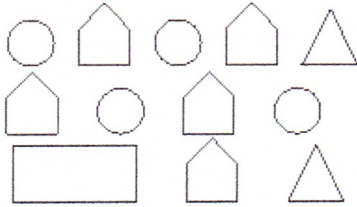d. 5 = 5, 10, 15, 20, 25, 30, 35, (40)
   8 = 8, 16, 24, 32, (40)

7 What is the least common denominator for $\frac{1}{6}$ and $\frac{3}{8}$?.

(A) 24
B 14
C 2
D 32

$$\frac{1}{6 \times 4} \quad \frac{1}{8 \times 3}$$

$$\frac{}{24} \quad \frac{}{24}$$

8 Of the shapes shown, $\frac{1}{3}$ are circles and $\frac{1}{12}$ are rectangles. What fraction of the shapes are either circles or rectangles?

$$\frac{1^{\times 4}}{3^{\times 4}} + \frac{1}{12} =$$

$$\frac{4}{12} + \frac{1}{12} = \frac{5}{12}$$

A $\frac{1}{3}$

B $\frac{3}{4}$

Ⓒ $\frac{5}{12}$

D $\frac{2}{15}$

9 Nicola and his sister hiked along the Lakeshore Trail and the McKinnon Trail. The Lakeshore Trail is $\frac{1}{4}$ mile long and the McKinnon Trail is $\frac{9}{16}$ mile long. How far did they walk along the trails?

A $\frac{5}{8}$ mile

Ⓑ $\frac{13}{16}$ mile

C $\frac{1}{2}$ mile

D $\frac{5}{16}$ mile

$$\frac{1^{\times 4}}{4^{\times 4}} + \frac{9}{16} =$$

$$\frac{4}{16} + \frac{9}{16} = \frac{13}{16}$$

10

A contractor was paving a driveway. He mixed $\frac{4}{7}$ ton of sand and $\frac{1}{3}$ ton of concrete. How much did the mixture weigh?

- A $\frac{1}{4}$ ton
- B $\frac{2}{5}$ ton
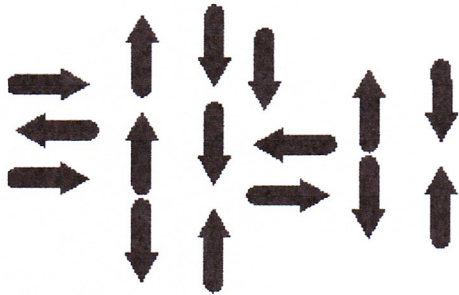- C $\frac{5}{7}$ ton
- **(D)** $\frac{19}{21}$ ton

$$\frac{4 \times 3}{7 \times 3} + \frac{1 \times 7}{3 \times 7}$$

$$\frac{12}{21} + \frac{7}{21} = \frac{19}{21}$$

11

Of the shapes shown, $\frac{3}{8}$ of the arrows are pointing downward, and $\frac{5}{16}$ of the arrows are pointing upward. What fraction of the arrows are pointing either downward or upward?

$$\frac{3 \times 2}{8 \times 2} + \frac{5}{16}$$

$$\frac{6}{16} + \frac{5}{16} = \frac{11}{16}$$

- A $\frac{1}{16}$
- B $\frac{1}{2}$
- C $\frac{5}{8}$
- **(D)** $\frac{11}{16}$

12

A painter is painting a house. He mixed $\frac{5}{9}$ gallon of white paint and $\frac{1}{6}$ gallon of blue paint. How many gallons was the mixture in all?

- A $\frac{2}{5}$ gallon
- B $\frac{4}{5}$ gallon
- C $\frac{7}{18}$ gallon
- **(D.)** $\frac{13}{18}$ gallon

$$\frac{5 \times 2}{9 \times 2} = \frac{10}{18}$$

$$+ \quad \frac{1 \times 3}{6 \times 3} = + \frac{3}{18} \quad = \frac{13}{18}$$

13 Glenn made a loaf of banana nut bread for a picnic. He used $\frac{1}{2}$ cup fewer nuts than in the recipe. If the recipe called for $\frac{5}{6}$ cup of nuts, what amount of nuts did Glenn use?

A $\frac{1}{3}$ cup

B $\frac{5}{6}$ cup

C 1 cup

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

$$\frac{5}{6} = \frac{5}{6}$$

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

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

14 Bart made potato salad for a picnic. He used $\frac{1}{4}$ cup fewer onions than the recipe called for. If the recipe called for $\frac{7}{8}$ cup of onions, what amount of onions did Bart use?

A $\frac{5}{8}$ cup

B $\frac{3}{8}$ cup

C $1\frac{1}{2}$ cups

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

$$\frac{7}{8} - \frac{1 \times 2}{4 \times 2} =$$

$$\frac{7}{8} - \frac{2}{8} = \frac{5}{8}$$

15 Cleo and Alexi entered a race to see who could bike the farthest in 3 minutes. Cleo biked $\frac{5}{6}$ mile. Alexi biked $\frac{7}{10}$ mile. How much farther did Cleo bike?

A $\frac{2}{15}$ mile

B $\frac{2}{5}$ mile

C $\frac{1}{2}$ mile

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

$$\frac{7 \times 3}{10 \times 3} - \frac{5 \times 5}{6 \times 5}$$

Alexi - $\frac{21}{30}$ $-$ $\frac{25}{30}$ Cleo

$$\frac{25}{30} - \frac{21}{30} = \frac{4 \div 2}{30 \div 2} = \frac{2}{15}$$

16

Janice needs to read $\frac{2}{3}$ of her book by Friday. So far she has read $\frac{1}{2}$ of it. What part of the book must she still read by Friday?

A $\frac{1}{6}$

B $\frac{5}{12}$

C $\frac{2}{5}$

D $\frac{1}{3}$

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

$$\frac{4}{6} - \frac{3}{6} = \frac{1}{6}$$

17

Olivia hopes to complete $\frac{4}{5}$ of the levels of her computer game by the end of the week. So far, she has completed $\frac{2}{3}$ of the levels. What part of the levels must she still complete to meet her goal?

A $\frac{2}{15}$

B $\frac{1}{3}$

C $\frac{1}{5}$

D $\frac{7}{30}$

$$\frac{4 \times 3}{5 \times 3} - \frac{2 \times 5}{3 \times 5}$$

$$\frac{12}{15} - \frac{10}{15} = \frac{2}{15}$$

18

Jenny is transferring addresses to her new address book. Last week, she transferred $\frac{1}{3}$ of the addresses. This week, she transferred another $\frac{1}{8}$ of the addresses. How many more addresses did she transfer last week?

A $\frac{1}{5}$

B $\frac{5}{12}$

C $\frac{5}{24}$

D $\frac{11}{12}$

$$\frac{1 \times 8}{3 \times 8} - \frac{1 \times 3}{8 \times 3}$$

$$\frac{8}{24} - \frac{3}{24} = \frac{5}{24}$$

19

Gayle used $\frac{1}{3}$ of a cup of raisins in her cookies, and Jimmy used $\frac{3}{4}$ of a cup of raisins in his cookies. How many more raisins did Jimmy use than Gayle? Write the answer in simplest form.

A $\frac{1}{4}$ cup

B $\frac{5}{6}$ cup

C $\frac{1}{2}$ cup

(D) $\frac{5}{12}$ cup

$$\frac{3\times3}{4\times3} - \frac{1\times4}{3\times4}$$

$$\frac{9}{12} - \frac{4}{12} = \frac{5}{12}$$

20

Katrina read for $\frac{1}{6}$ of an hour on Saturday and $\frac{2}{3}$ of an hour on Sunday. In simplest form, how much time did Katrina read altogether?

(A) $\frac{5}{6}$ hour

B $\frac{3}{9}$ hour

C $\frac{5}{12}$ hour

D $\frac{2}{3}$ hour

$$\frac{1}{6} + \frac{2\times2}{3\times2}$$

$$\frac{1}{6} + \frac{4}{6} = \frac{5}{6}$$