Topic 9 Study Guide

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

    A $\frac{10}{15}, \frac{16}{24}$

    B $\frac{20}{30}, \frac{35}{45}$

    C $\frac{14}{18}, \frac{25}{30}$

    D $\frac{24}{30}, \frac{22}{33}$

2   Write the fraction in simplest form.

$\frac{12}{18}$

    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 $\frac{8}{30}$

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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 $\dfrac{1}{42}$

   B $\dfrac{1}{3}$

   C $\dfrac{1}{7}$

   D $\dfrac{1}{6}$

5   Write the fraction in simplest form.

$\dfrac{9}{12}$

   A $\dfrac{1}{2}$

   B $\dfrac{3}{6}$

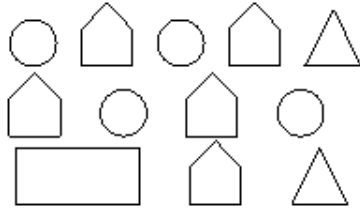   C $\dfrac{3}{4}$

   D $\dfrac{5}{6}$

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

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

   A   24
   B   14
   C   2
   D   32

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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?


    A $\frac{1}{3}$

    B $\frac{3}{4}$

    C $\frac{5}{12}$

    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

    B $\frac{13}{16}$ mile

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

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

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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

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?
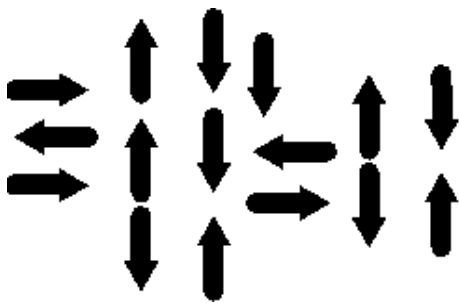
  A $\frac{1}{16}$

  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

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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

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

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

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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 $\frac{1}{3}$

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 $\frac{7}{30}$

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 $\frac{11}{12}$

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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

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