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## 5th Grade Chapter 7 - Fraction Concepts

## Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

1. Which number does NOT match the diagram shown?

A. $\frac{7}{4}$
B. $1 \frac{3}{4}$
C. $\frac{3}{2}$
D. $1+\frac{3}{4}$
2. Bill is making his personal bread for his family supper. Here is the recipe:

| Bill's Bread Recipe |  |
| :--- | :--- |
| $4 \frac{3}{4}$ cups of flour | $1 \frac{1}{2}$ packages of yeast |
| $3 \frac{1}{3}$ tablespoons sugar | $1 \frac{3}{8}$ sticks of butter |
| $2 \frac{2}{3}$ teaspoons salt |  |

Which fraction below is another way to express the amount of flour in Bill's recipe?
A. $\frac{19}{4}$ cups
B. $\frac{16}{4}$ cups
C. $\frac{11}{4}$ cups
D. $\frac{7}{4}$ cups
3. What other information, if any, is needed to solve the following problem?

## Each week, Luis earns $\$ 3.15$ for

 vacuuming rugs and Joshua earns $\$ 5.50$ for pulling weeds. After four weeks, does Joshua have enough money to buy a pair of shoes?A. cost of the pair of shoes
B. how much Luis saves
C. how many weeds there are
D. no other information is needed
4. A fraction of this group of shapes is dark.

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Which of the following groups has an equivalent fraction of dark shapes?
A.
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C.
00000000
B.
000000
D.
00000000
5. The chart shows two sets of fractions. Each fraction in Group A is paired with an equivalent fraction in Group B.

## EQUIVALENT FRACTIONS

| Group A | Group B |
| :---: | :---: |
| $\frac{28}{32}$ | $\frac{7}{8}$ |
| $\frac{16}{24}$ | $\frac{4}{6}$ |
| $\frac{12}{32}$ | $\frac{3}{8}$ |

Which of these describes the method that can be used to change each fraction in Group A to its partner in Group B?
A. Divide both the numerator and the denominator by 4 .
B. Multiply both the numerator and the denominator by 5 .
C. Subtract 12 from both the numerator and the denominator.
D. Subtract 21 from both the numerator and the denominator.
6. Which fraction shows $2 \div 3$ ?
A. $\frac{2}{3}$
B. $\frac{3}{2}$
C. $\frac{1}{2}$
D. $\frac{1}{3}$
7. Which mixed number is equal to $\frac{9}{8}$ ?
A. $8 \frac{1}{8}$
B. $2 \frac{7}{8}$
C. $1 \frac{1}{8}$
D. $1 \frac{1}{9}$
8. To make orange juice, you combine 3 cans of water with 1 can of concentrate. How many cans of water do you combine with 6 cans of concentrate?
A. 2 cans
B. 6 cans
C. 9 cans
D. 18 cans
9. Which is the missing number in $\frac{1}{3}=\frac{?}{12}$ ?
A. 6
B. 4
C. 3
D. 2

## Short Answer

10. At Elena's birthday party, 9 people will share 2 cakes. What fractional amount will each person get?
11. If the pizzas shown here are shared equally by 3 people, how much will each person get?

12. After returning from the store, Hilda counted that she had 12 new baseball cards. Hilda's mother told her that it would be nice to give away $\frac{2}{6}$ of her baseball cards to her younger brother. What fraction below is equivalent to the $\frac{2}{6}$ Hilda's mother suggested? $\frac{2}{6}=\frac{?}{12}$
13. There are 12 mangoes in a bag. If Haru takes out 4 of the mangoes, what fraction of the mangoes did she take out of the bag?

## Other

14. Racing with Fractions Don is running in a 28 -mile race. In two hours he has run $\frac{3}{4}$ of the race.

Part A How far has Don already run? Solve using a picture or equivalent fractions.

## Show All Work

Answer $\qquad$ miles

Part B How far does Don have to go?


## 5th Grade Chapter 7 - Fraction Concepts Answer Section

## MULTIPLE CHOICE

1. ANS: C REF: 0703 Lesson 7-3: Mixed Numbers

OBJ: Express fractions greater than 1 as mixed numbers or improper fractions.
TOP: Intervention H15: Mixed Numbers, NCTM 3-5: Num.1.3 KEY: fractions, mixed numbers
2. ANS: A REF: 0703 Lesson 7-3: Mixed Numbers

OBJ: Express fractions greater than 1 as mixed numbers or improper fractions.
TOP: Intervention H15: Mixed Numbers, NCTM 3-5: Num.1.3 KEY: fractions, mixed numbers
3. ANS: A REF: 0706 Lesson 7-6: Problem-Solving Skill: Extra or Missing Information

OBJ: Solve problems involving too much information by using only the information needed and decide when there is not enough information to solve a problem.

STO: N.FL. 05.06
TOP: Intervention M6: Problem-Solving Skill: Extra or Missing Information
KEY: problem-solving skill
4. ANS: D REF: 0707 Lesson 7-7: Understanding Equivalent Fractions

OBJ: Identify and write equivalent fractions.
TOP: Intervention H8: Finding Equivalent Fractions, NCTM 3-5: Num.1.5
KEY: fractions
5. ANS: A REF: 0708 Lesson 7-8: Finding Equivalent Fractions

OBJ: Identify fractions that are equivalent and find fractions equivalent to a given fraction using models and/or a computational procedure. STO: N.ME.05.11
TOP: Intervention H24: Equivalent Fractions, NCTM 3-5: Num.1.5
KEY: fractions, comparing
6. ANS: A REF: 0702 Lesson 7-2: Fractions and Division

OBJ: Division can be used to divide objects into equal parts where the parts are fractions of a whole.
STO: N.ME.05.10 TOP: Intervention H21: Fractions and Division, NCTM 3-5: Num.1.3
KEY: fractions
7. ANS: C REF: 0703 Lesson 7-3: Mixed Numbers

OBJ: Express fractions greater than 1 as mixed numbers or improper fractions.
TOP: Intervention H15: Mixed Numbers, NCTM 3-5: Num.1.3 KEY: fractions, mixed numbers
8. ANS: D REF: 0707 Lesson 7-7: Understanding Equivalent Fractions

OBJ: Identify and write equivalent fractions.
TOP: Intervention H8: Finding Equivalent Fractions, NCTM 3-5: Num.1.5
KEY: fractions
9. ANS: B REF: 0708 Lesson 7-8: Finding Equivalent Fractions

OBJ: Identify fractions that are equivalent and find fractions equivalent to a given fraction using models and/or a computational procedure. STO: N.ME.05.11
TOP: Intervention H24: Equivalent Fractions, NCTM 3-5: Num.1.5
KEY: fractions

## SHORT ANSWER

10. ANS:
$\frac{2}{9}$ cake
REF: 0702 Lesson 7-2: Fractions and Division
OBJ: Division can be used to divide objects into equal parts where the parts are fractions of a whole.
STO: N.ME.05.10 TOP: Intervention H21: Fractions and Division, NCTM 3-5: Num.1.3
KEY: fractions
11. ANS:
$\frac{2}{3}$ pizza
REF: 0702 Lesson 7-2: Fractions and Division
OBJ: Division can be used to divide objects into equal parts where the parts are fractions of a whole.
STO: N.ME.05.10 TOP: Intervention H21: Fractions and Division, NCTM 3-5: Num.1.3
KEY: fractions
12. ANS:
$\frac{4}{12}$
REF: 0708 Lesson 7-8: Finding Equivalent Fractions
OBJ: Identify fractions that are equivalent and find fractions equivalent to a given fraction using models and/or a computational procedure. STO: N.ME.05.11
TOP: Intervention H24: Equivalent Fractions, NCTM 3-5: Num.1.5
KEY: fractions
13. ANS:

1
3
REF: 0709 Lesson 7-9: Greatest Common Factor
OBJ: Determine common factors and the greatest common factor of numbers.
TOP: Intervention H4: Greatest Common Factor
KEY: fractions

## OTHER

14. ANS:

Part A: 21 miles; Sample Work: I used a rectangle to represent the race. I cut this rectangle into fourths. The race is 28 miles long. I divided 28 by 4 and got 7 . So, each fourth of the race is 7 miles. Three-fourths would be 3 of the $\frac{1}{4}$ sections or 7 miles which is 21 .


Part B: 7 miles; Sample Work: Don has $\frac{1}{4}$ of the marathon left or 7 miles left. (Alternate: $28-21=7$ miles)

| RUBRIC |  |
| :---: | :--- |
| $\mathbf{4}$ points | The answers are correct AND the explanation/work is reasonable. |
| $\mathbf{3}$ points | Both answers are correct but the explanation/work is missing for <br> one question. |
| $\mathbf{2}$ points | At least one answer is correct and the explanation/work is <br> reasonable. |
| $\mathbf{1}$ point | Response shows limited understanding. |

REF: 0707 Lesson 7-7: Understanding Equivalent Fractions
OBJ: Identify and write equivalent fractions.
TOP: Intervention H8: Finding Equivalent Fractions, NCTM 3-5: Num.1.5
KEY: problem-solving strategy, 4-point rubric, fractions, Physical Education

