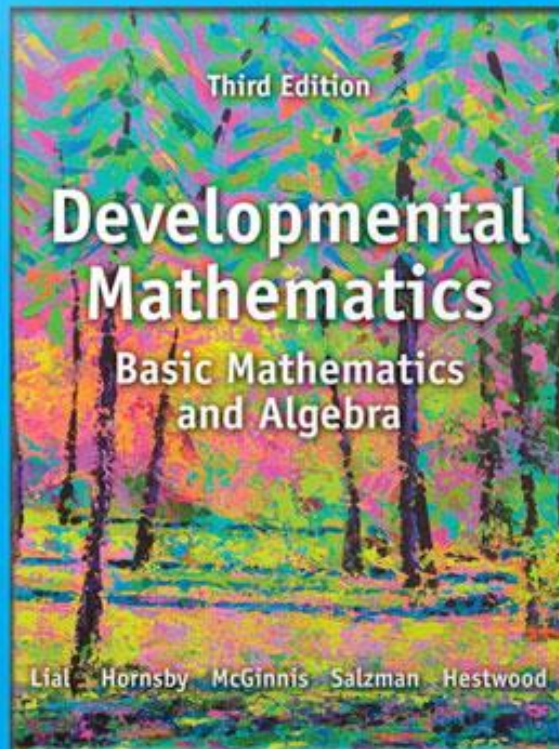


**TEST BANK**



Third Edition

**Developmental  
Mathematics**

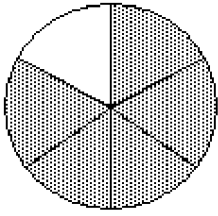
Basic Mathematics  
and Algebra

Lial · Hornsby · McGinnis · Salzman · Hestwood

**MULTIPLE CHOICE.** Choose the one alternative that best completes the statement or answers the question.

Write fractions to represent the shaded and unshaded portions of the figure.

1)



A)  $\frac{5}{1}, \frac{5}{4}$

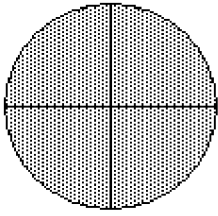
B)  $\frac{5}{6}, \frac{1}{6}$

C)  $\frac{1}{5}, \frac{4}{5}$

D)  $\frac{1}{6}, \frac{5}{6}$

1) \_\_\_\_\_

2)



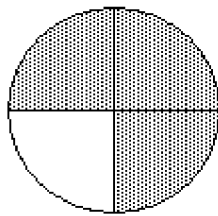
A)  $\frac{7}{8}, \frac{1}{8}$

B)  $\frac{7}{4}, \frac{1}{4}$

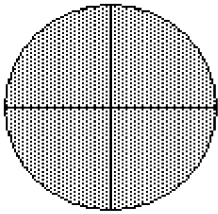
C)  $\frac{1}{7}, \frac{6}{7}$

D)  $\frac{3}{4}, \frac{1}{4}$

2) \_\_\_\_\_



3)



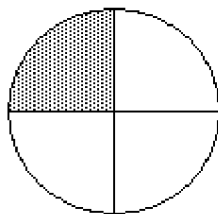
A)  $\frac{5}{3}, \frac{3}{3}$

B)  $\frac{5}{8}, \frac{3}{8}$

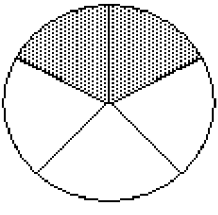
C)  $\frac{3}{5}, \frac{5}{5}$

D)  $\frac{5}{4}, \frac{3}{4}$

3) \_\_\_\_\_



4)



A)  $\frac{2}{5}, \frac{3}{5}$

B)  $\frac{2}{3}, \frac{1}{3}$

C)  $\frac{5}{2}, \frac{5}{3}$

D)  $\frac{3}{2}, \frac{1}{2}$

4) \_\_\_\_\_

5)

5) \_\_\_\_\_

A)  $\frac{1}{3}, \frac{2}{3}$

B)  $\frac{3}{1}, \frac{3}{2}$

C)  $\frac{3}{4}, \frac{1}{4}$

D)  $\frac{1}{4}, \frac{3}{4}$

6)

6) \_\_\_\_\_

A)  $\frac{3}{8}, \frac{5}{8}$

B)  $\frac{5}{3}, \frac{5}{2}$

C)  $\frac{3}{5}, \frac{2}{5}$

D)  $\frac{5}{8}, \frac{3}{8}$

7)

7) \_\_\_\_\_

A)  $\frac{5}{3}, \frac{1}{3}$

B)  $\frac{1}{5}, \frac{1}{1}$

C)  $\frac{5}{1}, \frac{1}{1}$

D)  $\frac{5}{6}, \frac{1}{6}$

8)

8) \_\_\_\_\_

A)  $\frac{7}{1}, \frac{1}{4}$

B)  $\frac{7}{4}, \frac{1}{4}$

C)  $\frac{7}{8}, \frac{1}{8}$

D)  $\frac{1}{7}, \frac{4}{1}$

9)

9) \_\_\_\_\_

A)  $\frac{11}{12}, \frac{1}{12}$

B)  $\frac{11}{6}, \frac{1}{6}$

C)  $\frac{11}{1}, \frac{1}{12}$

D)  $\frac{1}{11}, \frac{12}{1}$

10)

10) \_\_\_\_\_

A)  $\frac{5}{3}, \frac{1}{3}$

B)  $\frac{3}{8}, \frac{5}{8}$

C)  $\frac{3}{5}, \frac{2}{5}$

D)  $\frac{5}{8}, \frac{3}{8}$

**Solve the problem.**

- 11) Of 23 crates of apples, 3 crates are Granny Smiths. What fraction of the crates are Granny Smiths? 11) \_\_\_\_\_  
A)  $\frac{23}{3}$                       B)  $\frac{20}{23}$                       C)  $\frac{3}{23}$                       D)  $\frac{23}{20}$
- 12) Of 23 crates of apples, 8 crates are Granny Smiths. What fraction of the crates are not Granny Smiths? 12) \_\_\_\_\_  
A)  $\frac{23}{8}$                       B)  $\frac{8}{23}$                       C)  $\frac{23}{15}$                       D)  $\frac{15}{23}$
- 13) A high school basketball team has 10 members. If 7 of the team members are juniors, find the fraction of the team members that are juniors. 13) \_\_\_\_\_  
A)  $\frac{10}{7}$                       B)  $\frac{7}{10}$                       C)  $\frac{3}{10}$                       D)  $\frac{10}{3}$
- 14) A high school basketball team has 12 members. If 5 of the team members are juniors and the rest are seniors, find the fraction of the team members that are seniors. 14) \_\_\_\_\_  
A)  $\frac{12}{7}$                       B)  $\frac{5}{12}$                       C)  $\frac{12}{5}$                       D)  $\frac{7}{12}$
- 15) In a microbiology class of 47 students, 23 students are graduate students. What fraction of the students are graduate students? 15) \_\_\_\_\_  
A)  $\frac{23}{47}$                       B)  $\frac{47}{24}$                       C)  $\frac{47}{23}$                       D)  $\frac{24}{47}$
- 16) In a microbiology class of 41 students, 16 students are graduate students. What fraction of the students are not graduate students? 16) \_\_\_\_\_  
A)  $\frac{41}{25}$                       B)  $\frac{41}{16}$                       C)  $\frac{16}{41}$                       D)  $\frac{25}{41}$
- 17) Of 104 bicycles in a bike rack, 37 are mountain bikes. What fraction of the bicycles are mountain bikes? 17) \_\_\_\_\_  
A)  $\frac{104}{67}$                       B)  $\frac{37}{104}$                       C)  $\frac{104}{37}$                       D)  $\frac{67}{104}$
- 18) Of 96 bicycles in a bike rack, 53 are mountain bikes. What fraction of the bicycles are not mountain bikes? 18) \_\_\_\_\_  
A)  $\frac{96}{53}$                       B)  $\frac{43}{96}$                       C)  $\frac{53}{96}$                       D)  $\frac{96}{43}$
- 19) Of 226 trees in the park, 53 are coniferous trees. What fraction of the trees are coniferous trees? 19) \_\_\_\_\_  
A)  $\frac{226}{53}$                       B)  $\frac{226}{173}$                       C)  $\frac{53}{226}$                       D)  $\frac{173}{226}$
- 20) Of 170 trees in the park, 31 are coniferous trees. What fraction of the trees are not coniferous trees? 20) \_\_\_\_\_  
A)  $\frac{139}{170}$                       B)  $\frac{170}{31}$                       C)  $\frac{170}{139}$                       D)  $\frac{31}{170}$

**Identify the numerator and denominator.**

21)  $\frac{7}{2}$

21) \_\_\_\_\_

- A) Numerator 9      B) Numerator  $\frac{2}{7}$       C) Numerator 2      D) Numerator 7  
Denominator 1      Denominator 7      Denominator 7      Denominator 2

22)  $\frac{7}{23}$

22) \_\_\_\_\_

- A) Numerator 23      B) Numerator  $\frac{7}{23}$   
Denominator 7      Denominator 1  
C) Numerator 7      D) Numerator 1  
Denominator 23      Denominator  $\frac{23}{7}$

**List the proper fractions in the group.**

23)  $\frac{9}{7}, \frac{5}{12}, \frac{7}{15}, \frac{3}{17}$

23) \_\_\_\_\_

- A)  $\frac{9}{7}, \frac{5}{12}, \frac{7}{15}, \frac{3}{17}$       B)  $\frac{9}{7}, \frac{13}{17}$       C)  $\frac{9}{7}$       D)  $\frac{5}{12}, \frac{7}{15}, \frac{3}{17}$

24)  $\frac{1}{4}, \frac{11}{7}, \frac{18}{18}, \frac{5}{4}, \frac{8}{3}$

24) \_\_\_\_\_

- A)  $\frac{11}{7}, \frac{18}{18}, \frac{5}{4}, \frac{8}{3}$       B)  $\frac{1}{4}$   
C)  $\frac{1}{4}, \frac{5}{4}, \frac{8}{3}$       D)  $\frac{1}{4}, \frac{11}{7}, \frac{18}{18}, \frac{5}{4}, \frac{8}{3}$

25)  $\frac{7}{12}, \frac{14}{13}, \frac{7}{2}, \frac{11}{4}, \frac{3}{4}$

25) \_\_\_\_\_

- A)  $\frac{7}{12}, \frac{3}{4}$       B)  $\frac{7}{2}, \frac{11}{4}, \frac{3}{4}$       C)  $\frac{7}{12}, \frac{11}{4}, \frac{3}{4}$       D)  $\frac{14}{13}, \frac{7}{2}, \frac{11}{4}$

26)  $\frac{16}{13}, \frac{13}{12}, \frac{11}{8}, \frac{17}{17}, \frac{2}{3}$

26) \_\_\_\_\_

- A)  $\frac{11}{8}$       B)  $\frac{13}{12}, \frac{11}{8}, \frac{17}{17}$   
C)  $\frac{16}{13}, \frac{13}{12}, \frac{11}{8}, \frac{2}{3}$       D)  $\frac{2}{3}$

$$27) \frac{3}{7}, \frac{5}{19}, \frac{7}{7}, \frac{2}{11}, \frac{16}{219}$$

27) \_\_\_\_\_

A)  $\frac{3}{7}, \frac{5}{19}, \frac{7}{7}, \frac{2}{11}, \frac{16}{219}$

B)  $\frac{7}{7}$

C)  $\frac{3}{7}, \frac{5}{19}, \frac{2}{11}, \frac{16}{219}$

D)  $\frac{5}{19}, \frac{7}{7}, \frac{2}{11}$

$$28) \frac{9}{7}, \frac{5}{12}, \frac{7}{15}, \frac{19}{12}, \frac{3}{17}$$

28) \_\_\_\_\_

A)  $\frac{9}{7}, \frac{19}{12}$

B)  $\frac{9}{7}, \frac{5}{12}, \frac{7}{15}, \frac{19}{12}, \frac{3}{17}$

C)  $\frac{5}{12}, \frac{7}{15}, \frac{3}{17}$

D)  $\frac{9}{7}, \frac{5}{12}, \frac{7}{15}$

List the improper fractions in the group.

$$29) \frac{16}{5}, \frac{4}{61}, \frac{7}{9}, \frac{28}{28}, \frac{41}{41}$$

29) \_\_\_\_\_

A)  $\frac{16}{5}, \frac{28}{28}, \frac{41}{41}$

B)  $\frac{16}{5}, \frac{4}{61}, \frac{7}{9}, \frac{41}{41}$

C)  $\frac{16}{5}, \frac{4}{61}, \frac{7}{9}, \frac{28}{28}, \frac{41}{41}$

D)  $\frac{4}{61}, \frac{7}{9}$

$$30) \frac{45}{4}, \frac{5}{13}, \frac{2}{6}, \frac{32}{23}, \frac{58}{58}$$

30) \_\_\_\_\_

A)  $\frac{5}{13}, \frac{2}{6}$

B)  $\frac{45}{4}, \frac{5}{13}, \frac{2}{6}, \frac{58}{58}$

C)  $\frac{45}{4}, \frac{32}{23}, \frac{58}{58}$

D)  $\frac{45}{4}, \frac{5}{13}, \frac{2}{6}, \frac{32}{23}, \frac{58}{58}$

$$31) \frac{47}{4}, \frac{4}{38}, \frac{2}{3}, \frac{63}{49}, \frac{43}{43}$$

31) \_\_\_\_\_

A)  $\frac{47}{4}, \frac{4}{38}, \frac{2}{3}, \frac{63}{49}, \frac{43}{43}$

B)  $\frac{4}{38}, \frac{2}{3}$

C)  $\frac{47}{4}, \frac{63}{49}, \frac{43}{43}$

D)  $\frac{47}{4}, \frac{4}{38}, \frac{2}{3}, \frac{43}{43}$

$$32) \frac{55}{2}, \frac{2}{56}, \frac{4}{9}, \frac{60}{16}, \frac{58}{58}$$

32) \_\_\_\_\_

A)  $\frac{2}{56}, \frac{4}{9}$

B)  $\frac{55}{2}, \frac{2}{56}, \frac{4}{9}, \frac{60}{16}, \frac{58}{58}$

C)  $\frac{55}{2}, \frac{2}{56}, \frac{4}{9}, \frac{58}{58}$

D)  $\frac{55}{2}, \frac{60}{16}, \frac{58}{58}$

33)  $\frac{48}{8}, \frac{2}{10}, \frac{4}{8}, \frac{59}{19}, \frac{25}{25}$

33) \_\_\_\_\_

A)  $\frac{48}{8}, \frac{59}{19}, \frac{25}{25}$

B)  $\frac{48}{8}, \frac{2}{10}, \frac{4}{8}, \frac{59}{19}, \frac{25}{25}$

C)  $\frac{2}{10}, \frac{4}{8}$

D)  $\frac{48}{8}, \frac{2}{10}, \frac{4}{8}, \frac{25}{25}$

34)  $\frac{50}{7}, \frac{6}{48}, \frac{7}{9}, \frac{20}{12}, \frac{22}{22}$

34) \_\_\_\_\_

A)  $\frac{50}{7}, \frac{6}{48}, \frac{7}{9}, \frac{22}{22}$

B)  $\frac{50}{7}, \frac{20}{12}, \frac{22}{22}$

C)  $\frac{6}{48}, \frac{7}{9}$

D)  $\frac{50}{7}, \frac{6}{48}, \frac{7}{9}, \frac{20}{12}, \frac{22}{22}$

**Fill in the blanks to complete the sentence.**

35) The fraction  $\frac{26}{58}$  represents \_\_\_\_\_ of the \_\_\_\_\_ equal parts into which a whole is divided.

35) \_\_\_\_\_

A)  $\frac{26}{58}, 58$

B)  $\frac{26}{58}, 26$

C) 58, 26

D) 26, 58

**Write the mixed number as an improper fraction.**

36)  $5\frac{7}{8}$

36) \_\_\_\_\_

A)  $\frac{40}{8}$

B)  $\frac{47}{8}$

C)  $\frac{40}{7}$

D)  $\frac{47}{7}$

37)  $2\frac{5}{9}$

37) \_\_\_\_\_

A)  $\frac{18}{5}$

B)  $\frac{18}{9}$

C)  $\frac{23}{9}$

D)  $\frac{23}{5}$

38)  $3\frac{2}{5}$

38) \_\_\_\_\_

A)  $\frac{17}{2}$

B)  $\frac{15}{5}$

C)  $\frac{15}{2}$

D)  $\frac{17}{5}$

39)  $2\frac{3}{7}$

39) \_\_\_\_\_

A)  $\frac{17}{7}$

B)  $\frac{14}{3}$

C)  $\frac{17}{3}$

D)  $\frac{14}{7}$

40)  $18\frac{1}{10}$

40) \_\_\_\_\_

A)  $\frac{181}{10}$

B)  $\frac{19}{10}$

C)  $\frac{18}{10}$

D)  $\frac{191}{10}$

41)  $18\frac{14}{15}$

A) 32

B)  $\frac{284}{15}$

C)  $\frac{84}{5}$

D) 252

41) \_\_\_\_\_

**Write the improper fraction as a whole or mixed number.**

42)  $\frac{11}{3}$

A)  $3\frac{2}{3}$

B)  $4\frac{2}{3}$

C)  $2\frac{2}{7}$

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

42) \_\_\_\_\_

43)  $\frac{22}{4}$

A)  $6\frac{1}{2}$

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

C)  $4\frac{1}{2}$

D)  $5\frac{1}{7}$

43) \_\_\_\_\_

44)  $\frac{26}{5}$

A)  $5\frac{1}{5}$

B)  $6\frac{1}{5}$

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

D)  $5\frac{1}{7}$

44) \_\_\_\_\_

45)  $\frac{7}{2}$

A)  $4\frac{1}{2}$

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

C)  $3\frac{1}{7}$

D)  $2\frac{1}{2}$

45) \_\_\_\_\_

46)  $\frac{36}{8}$

A)  $4\frac{4}{7}$

B)  $5\frac{4}{8}$

C)  $4\frac{4}{8}$

D)  $3\frac{4}{8}$

46) \_\_\_\_\_

47)  $\frac{168}{7}$

A) 167

B)  $\frac{24}{2}$

C) 169

D) 24

47) \_\_\_\_\_

48)  $\frac{296}{11}$

A)  $296\frac{11}{296}$

B)  $\frac{11}{296}$

C)  $296\frac{296}{11}$

D)  $26\frac{10}{11}$

48) \_\_\_\_\_

49)  $\frac{317}{2}$

A)  $1585\frac{2}{317}$

B)  $158\frac{1}{2}$

C)  $1585\frac{317}{2}$

D)  $\frac{2}{317}$

49) \_\_\_\_\_



50)  $\frac{2058}{14}$

A) 147

B) 2057

C)  $\frac{147}{2}$

D) 2059

50) \_\_\_\_\_

**Find all the factors for the number.**

51) 30

- A) 1, 2, 3, 5, 6, 10, 15, 30  
C) 5, 6, 10, 30

- B) 1, 5, 6, 30  
D) 1, 2, 3, 5, 6, 10, 20, 30

51) \_\_\_\_\_

52) 28

- A) 1, 2, 4, 7, 8, 14, 28  
C) 2, 7, 14, 28

- B) 1, 2, 7, 14, 28  
D) 1, 2, 4, 7, 14, 28

52) \_\_\_\_\_

53) 36

- A) 2, 4, 6, 12, 18, 36  
C) 1, 2, 3, 4, 6, 9, 12, 18, 36

- B) 1, 2, 3, 4, 5, 6, 9, 10, 12, 18, 36  
D) 1, 2, 4, 6, 12, 18, 36

53) \_\_\_\_\_

54) 45

- A) 1, 3, 5, 15, 45  
C) 1, 2, 3, 5, 9, 15, 30, 45

- B) 1, 3, 5, 9, 15, 30, 45  
D) 1, 3, 5, 9, 15, 45

54) \_\_\_\_\_

55) 56

- A) 1, 2, 4, 7, 8, 14, 18, 28, 56  
C) 1, 2, 3, 4, 7, 8, 14, 18, 28, 56

- B) 2, 4, 7, 8, 14, 28  
D) 1, 2, 4, 7, 8, 14, 28, 56

55) \_\_\_\_\_

56) 63

- A) 1, 3, 7, 9, 21, 63  
C) 1, 2, 3, 7, 9, 21, 36, 63

- B) 3, 5, 7, 9, 11, 21, 63  
D) 1, 3, 5, 7, 9, 11, 21, 63

56) \_\_\_\_\_

57) 66

- A) 1, 2, 3, 9, 11, 22, 33, 66  
C) 1, 2, 3, 6, 11, 22, 33, 66

- B) 1, 3, 11, 22, 33, 66  
D) 1, 2, 3, 4, 11, 16, 22, 33, 66

57) \_\_\_\_\_

58) 70

- A) 1, 2, 3, 5, 7, 9, 15, 35, 70  
C) 1, 2, 5, 7, 35, 70

- B) 1, 2, 5, 7, 10, 14, 35, 70  
D) 1, 3, 5, 7, 9, 15, 20, 35, 70

58) \_\_\_\_\_

59) 72

- A) 1, 2, 3, 4, 6, 8, 9, 12, 24, 36, 72  
C) 1, 2, 3, 4, 6, 9, 12, 14, 18, 24, 36, 72

- B) 1, 2, 3, 4, 6, 8, 9, 12, 18, 24, 36, 72  
D) 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 18, 24, 36, 72

59) \_\_\_\_\_

60) 84

- A) 1, 2, 3, 4, 7, 14, 21, 28, 42, 84  
C) 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, 14, 21, 28, 42, 84

- B) 1, 2, 3, 4, 6, 7, 12, 14, 21, 28, 42, 84  
D) 1, 2, 3, 4, 6, 7, 12, 14, 21, 42, 84

60) \_\_\_\_\_

**Decide whether the number is prime or composite.**

61) 44

A) Prime

B) Composite

61) \_\_\_\_\_

- 62) 29  
 A) Prime  
 B) Composite  
 62) \_\_\_\_\_
- 63) 36  
 A) Prime  
 B) Composite  
 63) \_\_\_\_\_
- 64) 19  
 A) Prime  
 B) Composite  
 64) \_\_\_\_\_
- 65) 10  
 A) Prime  
 B) Composite  
 65) \_\_\_\_\_

**Find the prime factorization of the number. Write the answer with exponents when repeated factors appear.**

- 66) 12  
 A)  $4 \cdot 3$   
 B)  $3^2$   
 C)  $4 \cdot 2$   
 D)  $2^2 \cdot 3$   
 66) \_\_\_\_\_
- 67) 265  
 A)  $5^2 \cdot 53$   
 B)  $5 \cdot 53$   
 C)  $5^2$   
 D)  $5 \cdot 51$   
 67) \_\_\_\_\_
- 68) 176  
 A)  $2^4 \cdot 11$   
 B)  $2^3 \cdot 13$   
 C)  $2^3 \cdot 11$   
 D)  $2^4 \cdot 7$   
 68) \_\_\_\_\_
- 69) 72  
 A)  $2^2 \cdot 3^2$   
 B)  $2^3 \cdot 3$   
 C)  $2^3 \cdot 3^2$   
 D)  $2^2 \cdot 3$   
 69) \_\_\_\_\_
- 70) 110  
 A)  $2 \cdot 5 \cdot 11$   
 B)  $10 \cdot 11$   
 C)  $5^2 \cdot 2$   
 D)  $2^2 \cdot 11$   
 70) \_\_\_\_\_
- 71) 350  
 A)  $2^2 \cdot 5^2 \cdot 7$   
 B)  $2 \cdot 5 \cdot 7$   
 C)  $14 \cdot 5^2$   
 D)  $2 \cdot 5^2 \cdot 7$   
 71) \_\_\_\_\_
- 72) 684  
 A)  $3^4 \cdot 19$   
 B)  $2^2 \cdot 3^2 \cdot 19$   
 C)  $2^3 \cdot 3^2 \cdot 19$   
 D)  $2^4 \cdot 19$   
 72) \_\_\_\_\_
- 73) 936  
 A)  $2^4 \cdot 3 \cdot 13$   
 B)  $2^3 \cdot 3^3 \cdot 13$   
 C)  $2^3 \cdot 3^2 \cdot 13$   
 D)  $2 \cdot 3^4 \cdot 13$   
 73) \_\_\_\_\_
- 74) 5200  
 A)  $2^3 \cdot 5^2 \cdot 13$   
 B)  $2^4 \cdot 5^2 \cdot 11$   
 C)  $2^4 \cdot 5^2 \cdot 13$   
 D)  $2^4 \cdot 5 \cdot 13$   
 74) \_\_\_\_\_
- 75) 1260  
 A)  $2^2 \cdot 3^2 \cdot 5 \cdot 7$   
 B)  $2^2 \cdot 3^2 \cdot 5 \cdot 11$   
 C)  $2^2 \cdot 3^2 \cdot 7$   
 D)  $2^3 \cdot 3^2 \cdot 5 \cdot 7$   
 75) \_\_\_\_\_

**Determine whether the number is divisible by 2, 3, 4, 5, 6, 7, 8, 9, and/or 10.**

- 76) 24  
 A) 2, 3, 4, 6, 8  
 B) 2, 3, 4, 8  
 C) 2, 3, 4  
 D) 2, 3, 4, 6  
 76) \_\_\_\_\_

- 77) 2232  
 A) 2, 3, 4, 6, 8, 9      B) 2, 3, 4, 8      C) 2, 3, 6, 8      D) 2, 3, 4      77) \_\_\_\_\_
- 78) 83  
 A) 3, 7      B) 3, 5      C) None      D) 3      78) \_\_\_\_\_
- 79) 2701  
 A) 3      B) None      C) 3, 7      D) 3, 5      79) \_\_\_\_\_
- 80) 85,963  
 A) 3, 7      B) None      C) 3, 5      D) 3      80) \_\_\_\_\_
- 81) 12,118  
 A) 2      B) 3, 4      C) 4      D) 2, 3, 4      81) \_\_\_\_\_
- 82) 22,962  
 A) 2, 3, 6      B) 2, 3, 4      C) 4, 5, 6      D) 3, 4, 6      82) \_\_\_\_\_
- 83) 14,335  
 A) 10      B) 2, 5, 10      C) 5      D) 5, 10      83) \_\_\_\_\_
- 84) 2697  
 A) 3, 9      B) 3      C) 2, 3, 9      D) 9      84) \_\_\_\_\_
- 85) 33,620  
 A) 2, 5      B) 2, 4, 5, 10      C) 4, 5      D) 4, 5, 10      85) \_\_\_\_\_

**Write the fraction in lowest terms.**

- 86)  $\frac{6}{10}$   
 A)  $\frac{3}{5}$       B)  $\frac{6}{5}$       C)  $\frac{3}{10}$       D)  $\frac{5}{3}$       86) \_\_\_\_\_
- 87)  $\frac{3}{18}$   
 A)  $\frac{1}{18}$       B)  $\frac{1}{6}$       C)  $\frac{2}{7}$       D)  $\frac{2}{12}$       87) \_\_\_\_\_
- 88)  $\frac{40}{48}$   
 A)  $\frac{8}{6}$       B)  $\frac{5}{8}$       C)  $\frac{40}{48}$       D)  $\frac{5}{6}$       88) \_\_\_\_\_
- 89)  $\frac{60}{135}$   
 A)  $\frac{60}{135}$       B)  $\frac{15}{9}$       C)  $\frac{4}{15}$       D)  $\frac{4}{9}$       89) \_\_\_\_\_

- 90)  $\frac{26}{49}$  90) \_\_\_\_\_  
 A)  $\frac{26}{49}$  B)  $\frac{24}{13}$  C)  $\frac{13}{24}$  D)  $\frac{1}{49}$
- 91)  $\frac{30}{40}$  91) \_\_\_\_\_  
 A)  $\frac{10}{4}$  B)  $\frac{3}{4}$  C)  $\frac{30}{40}$  D)  $\frac{3}{10}$
- 92)  $\frac{52}{76}$  92) \_\_\_\_\_  
 A)  $\frac{13}{19}$  B)  $\frac{4}{19}$  C)  $\frac{52}{76}$  D)  $\frac{13}{4}$
- 93)  $\frac{70}{80}$  93) \_\_\_\_\_  
 A)  $\frac{7}{8}$  B)  $\frac{10}{8}$  C)  $\frac{7}{10}$  D)  $\frac{70}{80}$
- 94)  $\frac{198}{288}$  94) \_\_\_\_\_  
 A)  $\frac{198}{288}$  B)  $\frac{11}{16}$  C)  $\frac{11}{18}$  D)  $\frac{18}{16}$
- 95)  $\frac{576}{32}$  95) \_\_\_\_\_  
 A) 18 B)  $\frac{1}{18}$  C)  $\frac{576}{32}$  D) 19

**Write the numerator and denominator of the fraction as a product of prime factors and divide by the common factors. Then write the fraction in lowest terms.**

- 96)  $\frac{8}{16}$  96) \_\_\_\_\_  
 A)  $\frac{2 \cdot 2 \cdot 2}{2 \cdot 2 \cdot 2 \cdot 2} = \frac{1}{4}$  B)  $\frac{2 \cdot 2}{2 \cdot 2 \cdot 2} = \frac{1}{2}$  C)  $\frac{2 \cdot 2 \cdot 2}{2 \cdot 2 \cdot 2} = \frac{1}{4}$  D)  $\frac{2 \cdot 2 \cdot 2}{2 \cdot 2 \cdot 2 \cdot 2} = \frac{1}{2}$
- 97)  $\frac{91}{156}$  97) \_\_\_\_\_  
 A)  $\frac{2 \cdot 2 \cdot 3 \cdot 13}{2 \cdot 7 \cdot 13} = \frac{13}{7}$  B)  $\frac{7 \cdot 13}{2 \cdot 2 \cdot 3 \cdot 13} = \frac{7}{12}$   
 C)  $\frac{2 \cdot 7 \cdot 13}{2 \cdot 2 \cdot 3 \cdot 13} = \frac{7}{13}$  D)  $\frac{5 \cdot 13}{2 \cdot 3 \cdot 13} = \frac{65}{12}$

98)  $\frac{40}{36}$

A)  $\frac{2 \cdot 2 \cdot 2 \cdot 5}{2 \cdot 2 \cdot 2 \cdot 3} = \frac{5}{3}$

C)  $\frac{2 \cdot 2 \cdot 5 \cdot 5}{2 \cdot 2 \cdot 3 \cdot 3} = \frac{25}{9}$

B)  $\frac{2 \cdot 2 \cdot 5}{2 \cdot 3 \cdot 3} = \frac{10}{9}$

D)  $\frac{2 \cdot 2 \cdot 2 \cdot 5}{2 \cdot 2 \cdot 3 \cdot 3} = \frac{10}{9}$

98) \_\_\_\_\_

99)  $\frac{1512}{132}$

A)  $\frac{2 \cdot 2 \cdot 2 \cdot 3 \cdot 3 \cdot 3 \cdot 7}{2 \cdot 2 \cdot 3 \cdot 11} = \frac{1512}{132}$

C)  $\frac{2 \cdot 2 \cdot 2 \cdot 3 \cdot 3 \cdot 3 \cdot 7}{2 \cdot 2 \cdot 3 \cdot 11} = \frac{126}{11}$

B)  $\frac{2 \cdot 2 \cdot 3 \cdot 3 \cdot 3 \cdot 7}{2 \cdot 3 \cdot 11} = \frac{126}{11}$

D)  $\frac{2 \cdot 3 \cdot 3 \cdot 7}{11} = \frac{126}{11}$

99) \_\_\_\_\_

**Write the fractions in lowest terms. Then determine whether the pair of fractions is equivalent or not equivalent.**

100)  $\frac{2}{7}$  and  $\frac{30}{105}$

A) Equivalent

B) Not equivalent

100) \_\_\_\_\_

101)  $\frac{2}{6}$  and  $\frac{36}{78}$

A) Equivalent

B) Not equivalent

101) \_\_\_\_\_

102)  $\frac{5}{7}$  and  $\frac{19}{21}$

A) Equivalent

B) Not equivalent

102) \_\_\_\_\_

103)  $\frac{1}{5}$  and  $\frac{10}{50}$

A) Equivalent

B) Not equivalent

103) \_\_\_\_\_

104)  $\frac{49}{70}$  and  $\frac{42}{60}$

A) Equivalent

B) Not equivalent

104) \_\_\_\_\_

105)  $\frac{70}{110}$  and  $\frac{77}{132}$

A) Equivalent

B) Not Equivalent

105) \_\_\_\_\_

**Multiply. Write the answer in lowest terms.**

106)  $\frac{6}{7} \cdot \frac{1}{6}$

A)  $\frac{7}{13}$

B)  $\frac{6}{13}$

C)  $\frac{1}{7}$

D)  $\frac{6}{42}$

106) \_\_\_\_\_

107)  $\frac{1}{8} \cdot \frac{4}{5}$  107) \_\_\_\_\_  
 A)  $\frac{4}{40}$  B)  $\frac{5}{13}$  C)  $\frac{1}{10}$  D)  $\frac{4}{9}$

108)  $\frac{1}{3} \cdot \frac{8}{9}$  108) \_\_\_\_\_  
 A)  $\frac{27}{8}$  B)  $\frac{8}{27}$  C)  $\frac{3}{4}$  D)  $\frac{8}{3}$

109)  $\frac{3}{4} \cdot \frac{5}{8}$  109) \_\_\_\_\_  
 A)  $\frac{32}{15}$  B)  $\frac{2}{3}$  C)  $\frac{15}{32}$  D)  $\frac{5}{6}$

110)  $\frac{1}{3} \cdot \frac{12}{35}$  110) \_\_\_\_\_  
 A)  $\frac{35}{36}$  B)  $\frac{36}{35}$  C)  $\frac{4}{35}$  D) 4

111)  $\frac{4}{7} \cdot \frac{1}{4} \cdot \frac{1}{3}$  111) \_\_\_\_\_  
 A)  $\frac{1}{21}$  B)  $\frac{16}{21}$  C)  $\frac{4}{21}$  D)  $\frac{1}{14}$

112)  $\frac{1}{4} \cdot \frac{4}{5} \cdot \frac{1}{8}$  112) \_\_\_\_\_  
 A)  $\frac{8}{5}$  B)  $\frac{1}{32}$  C)  $\frac{1}{40}$  D)  $\frac{1}{5}$

113)  $\frac{12}{25} \cdot \frac{40}{66} \cdot \frac{15}{32}$  113) \_\_\_\_\_  
 A)  $\frac{6}{11}$  B)  $\frac{3}{11}$  C)  $\frac{3}{44}$  D)  $\frac{3}{22}$

114)  $\frac{48}{64} \cdot \frac{16}{27} \cdot \frac{45}{24}$  114) \_\_\_\_\_  
 A)  $\frac{5}{18}$  B)  $\frac{5}{6}$  C)  $\frac{5}{24}$  D)  $\frac{5}{9}$

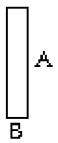
**Multiply. Write the answer in lowest terms and as a whole or mixed number where possible.**

115)  $42 \cdot \frac{2}{7}$  115) \_\_\_\_\_  
 A)  $18\frac{1}{49}$  B) 12 C) 6 D) 10

- 116)  $24 \cdot \frac{5}{9}$  116) \_\_\_\_\_  
 A) 40 B)  $\frac{5}{27}$  C) 5 D)  $13\frac{1}{3}$
- 117)  $120 \cdot \frac{1}{6}$  117) \_\_\_\_\_  
 A) 20 B)  $\frac{1}{6}$  C) 2 D)  $\frac{120}{6}$
- 118)  $90 \cdot \frac{2}{3}$  118) \_\_\_\_\_  
 A) 120 B) 80 C) 90 D) 60
- 119)  $\frac{4}{5} \cdot 325$  119) \_\_\_\_\_  
 A) 260 B)  $81\frac{1}{4}$  C) 256 D) 325
- 120)  $\frac{2}{7} \cdot 131$  120) \_\_\_\_\_  
 A)  $\frac{2}{7}$  B) 262 C)  $37\frac{3}{7}$  D)  $\frac{2}{917}$
- 121)  $30 \cdot \frac{1}{10} \cdot \frac{5}{21}$  121) \_\_\_\_\_  
 A) 15 B)  $\frac{1}{14}$  C)  $\frac{5}{7}$  D)  $1\frac{2}{5}$
- 122)  $\frac{66}{60} \cdot 720 \cdot \frac{4}{8}$  122) \_\_\_\_\_  
 A) 440 B) 396 C) 360 D) 400

**Find the area of the rectangle.**

123)



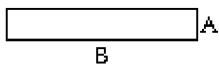
$$A = \frac{8}{13} \text{ foot}$$

$$B = \frac{1}{4} \text{ foot}$$

- A)  $\frac{2}{13}$  square foot B)  $\frac{8}{52}$  square foot C)  $\frac{8}{17}$  square foot D)  $\frac{9}{17}$  square foot

123) \_\_\_\_\_

124)



$$A = \frac{5}{9} \text{ in.}$$

$$B = 9 \text{ in.}$$

A)  $\frac{86}{9} \text{ in.}^2$

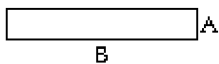
B)  $\frac{45}{9} \text{ in.}^2$

C)  $\frac{14}{9} \text{ in.}^2$

D)  $5 \text{ in.}^2$

124) \_\_\_\_\_

125)



$$A = \frac{16}{27} \text{ mi}$$

$$B = \frac{18}{22} \text{ mi}$$

A)  $\frac{288}{594} \text{ mi}^2$

B)  $\frac{34}{49} \text{ mi}^2$

C)  $\frac{16}{33} \text{ mi}^2$

D)  $\frac{7}{10} \text{ mi}^2$

125) \_\_\_\_\_

**Solve the problem. Write the answer in lowest terms and as a whole or mixed number where possible.**

126) Find the area of a rectangular banner having a length of 15 feet and a width of  $\frac{1}{12}$  foot.

126) \_\_\_\_\_

A)  $3\frac{3}{4} \text{ ft}^2$

B)  $\frac{1}{36} \text{ ft}^2$

C)  $1 \text{ ft}^2$

D)  $1\frac{1}{4} \text{ ft}^2$

127) Find the area of a rectangular table top having a length of 4 feet and a width of  $\frac{11}{4}$  feet.

127) \_\_\_\_\_

A)  $11 \text{ ft}^2$

B)  $7\frac{1}{2} \text{ ft}^2$

C)  $3\frac{3}{4} \text{ ft}^2$

D)  $\frac{1}{11} \text{ ft}^2$

128) A rectangular parking lot measures  $\frac{3}{10}$  mile by  $\frac{2}{15}$  mile. Find the area of the parking lot.

128) \_\_\_\_\_

A)  $\frac{1}{30} \text{ mi}^2$

B)  $\frac{1}{5} \text{ mi}^2$

C)  $\frac{2}{75} \text{ mi}^2$

D)  $\frac{1}{25} \text{ mi}^2$

129) Layer Cake A is  $\frac{1}{2}$  yard long and  $\frac{1}{4}$  yard wide. Layer Cake B is  $\frac{3}{8}$  yard long and  $\frac{1}{2}$  yard wide.

129) \_\_\_\_\_

Which cake has the larger area?

A) Layer Cake B

B) Layer Cake A

**Solve the problem.**

130) A rectangular parking lot measures  $\frac{3}{14}$  mile by  $\frac{2}{13}$  mile. Find the area of the parking lot.

130) \_\_\_\_\_

A)  $\frac{2}{91} \text{ mi}^2$

B)  $\frac{5}{182} \text{ mi}^2$

C)  $\frac{5}{27} \text{ mi}^2$

D)  $\frac{3}{91} \text{ mi}^2$



- 131) Find the area of a rectangular table top having a length of 5 feet and a width of  $\frac{11}{4}$  feet. 131) \_\_\_\_\_  
 A)  $4 \text{ ft}^2$                       B)  $13\frac{3}{4} \text{ ft}^2$                       C)  $\frac{4}{55} \text{ ft}^2$                       D)  $8 \text{ ft}^2$
- 132) A rectangular sheet of paper measures  $\frac{2}{5}$  foot by  $\frac{1}{5}$  foot. Find its area. 132) \_\_\_\_\_  
 A)  $\frac{3}{5} \text{ ft}^2$                       B)  $\frac{2}{25} \text{ ft}^2$                       C)  $\frac{3}{10} \text{ ft}^2$                       D)  $\frac{3}{25} \text{ ft}^2$
- 133) A rectangular dog bed is  $\frac{2}{7}$  yard by  $\frac{1}{7}$  yard. Find its area. 133) \_\_\_\_\_  
 A)  $\frac{3}{14} \text{ yd}^2$                       B)  $\frac{3}{49} \text{ yd}^2$                       C)  $\frac{2}{49} \text{ yd}^2$                       D)  $\frac{3}{7} \text{ yd}^2$
- 134) A warehouse stores 1230 different inventory items, of which  $\frac{3}{10}$  are perishable. How many of the 134) \_\_\_\_\_  
 inventory items are perishable?  
 A) 369 items                      B) 366 items                      C) 374 items                      D) 615 items
- 135) Mr. and Mrs. Williams have a car loan of \$9100. They have paid off  $\frac{8}{13}$  of the loan. How much of 135) \_\_\_\_\_  
 the loan have they paid off?  
 A) \$700                      B) \$6400                      C) \$5600                      D) \$4800
- 136) During elections at the local union,  $\frac{4}{7}$  of the members voted. If there are 105 members, how many 136) \_\_\_\_\_  
 voted?  
 A) 60 members                      B) 56 members                      C) 64 members                      D) 15 members
- 137) A restaurant has a capacity of 33 patrons. If the restaurant is  $\frac{7}{11}$  full, how many patrons are at the 137) \_\_\_\_\_  
 restaurant?  
 A) 21 patrons                      B) 14 patrons                      C) 3 patrons                      D) 28 patrons
- 138) Rich can machine 90 units in 10 hours. How many units can he machine in 2 hours? 138) \_\_\_\_\_  
 A) 18 units                      B) 180 units                      C) 9 units                      D) 4 unit(s)
- 139) Betsy can ride her bike 30 miles in 6 hours. How many miles can she ride in 4 hours? 139) \_\_\_\_\_  
 A) 20 miles                      B) 5 miles                      C) 1 mile(s)                      D) 120 miles
- 140) One fifth of Mary's earned income is deducted from her paycheck for withholdings. Three fourths 140) \_\_\_\_\_  
 of the withholdings are for taxes. What fraction of Mary's earned income is deducted for taxes?  
 A)  $\frac{4}{15}$                       B)  $\frac{1}{5}$                       C)  $\frac{4}{9}$                       D)  $\frac{3}{20}$

141) One fifth of Joan's earned income is deducted for withholdings. Three tenths of the withholdings are for federal income tax. What fraction of Joan's earned income is deducted for federal income tax? 141) \_\_\_\_\_

- A)  $\frac{3}{50}$                       B)  $\frac{4}{15}$                       C)  $\frac{2}{3}$                       D)  $\frac{2}{25}$

142) One fifth of Joe's earned income is deducted for withholdings. One third of the withholdings are for social security (FICA). What fraction of Joe's earned income is deducted for social security? 142) \_\_\_\_\_

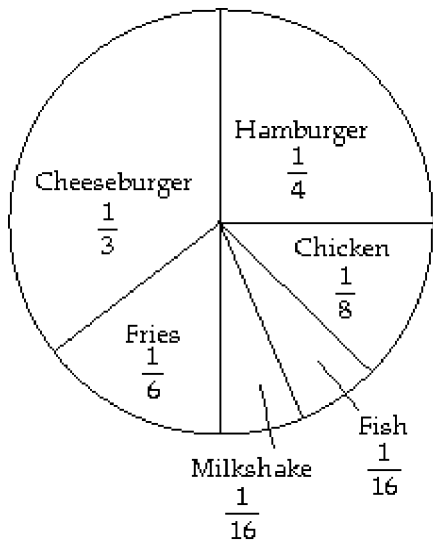
- A)  $\frac{1}{15}$                       B)  $\frac{2}{15}$                       C)  $\frac{1}{4}$                       D)  $\frac{3}{5}$

143) A certain scholarship will pay for  $\frac{3}{5}$  of a student's total tuition. How much will a student who receives this scholarship pay toward tuition, if tuition is \$300? 143) \_\_\_\_\_

- A) \$240                      B) \$120                      C) \$297                      D) \$180

**Use the circle graph to answer the question.**

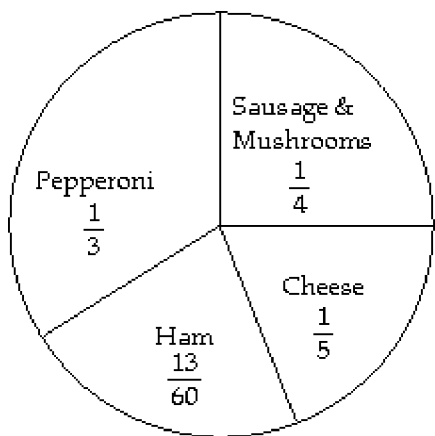
144) Last year, one family ate fast food 576 times. The circle graph shows the types of food eaten for the year. Find the number of times fish was eaten. 144) \_\_\_\_\_



- A) 192 times                      B) 72 times                      C) 36 times                      D) 144 times

145) On a typical night at Skinny's Pizza, 240 pizzas are ordered. How many pepperoni pizzas are ordered?

145) \_\_\_\_\_



- A) 720 pizzas      B) 60 pizzas      C) 48 pizzas      D) 80 pizzas

The following table shows the earnings for the Juarez family last year. Use this information to answer the question.

Month	Earnings	Month	Earnings
Jan.	\$1400	July	\$1300
Feb.	\$1150	Aug.	\$2450
Mar.	\$2950	Sept.	\$2500
Apr.	\$2300	Oct.	\$2000
May	\$1650	Nov.	\$2350
June	\$2700	Dec.	\$2400

146) What was the family's total income from January thru June?

146) \_\_\_\_\_

- A) \$13,000      B) \$11,000      C) \$9,200      D) \$12,150

147) What was the family's total income for the year?

147) \_\_\_\_\_

- A) \$25,150      B) \$22,000      C) \$23,750      D) \$24,000

148) If the family paid  $\frac{1}{5}$  of their total income in taxes for the year, how much was paid in taxes?

148) \_\_\_\_\_

- A) \$5920      B) \$5030      C) \$4200      D) \$5400

149) If  $\frac{7}{100}$  of the family's total income was spent on clothing, how much was spent for clothing last year?

149) \_\_\_\_\_

- A) \$1680      B) \$2030      C) \$1760.50      D) \$1890

150) The family saved  $\frac{1}{10}$  of their total income each month. How much savings did they have at the end of June?

150) \_\_\_\_\_

- A) \$1215      B) \$920      C) \$1160      D) \$1300

- 151) The family saved  $\frac{9}{100}$  of their total income each month. How much savings did they have at the end of the year? 151) \_\_\_\_\_  
 A) \$2430                      B) \$2664                      C) \$2263.50                      D) \$1890
- 152) The family used  $\frac{7}{100}$  of their income for food purchases. How much did they spend on food purchases for the year? 152) \_\_\_\_\_  
 A) \$1760.50                      B) \$1470                      C) \$1890                      D) \$2072
- 153) The family used  $\frac{13}{100}$  of their income on rent payments. How much did they spend on rent for the year? 153) \_\_\_\_\_  
 A) \$3510                      B) \$3848                      C) \$2730                      D) \$3269.50
- 154) If  $\frac{1}{10}$  of the family income is spent on entertainment, how much did they spend for entertainment last year? 154) \_\_\_\_\_  
 A) \$2960                      B) \$2700                      C) \$2100                      D) \$2515
- 155) Other expenses account for  $\frac{7}{50}$  of the family income. How much was spent last year on other expenses? 155) \_\_\_\_\_  
 A) \$3521                      B) \$2800                      C) \$2940                      D) \$3864

**Find the reciprocal.**

- 156)  $\frac{8}{13}$  156) \_\_\_\_\_  
 A) 13                      B)  $\frac{8}{13}$                       C)  $\frac{1}{8}$                       D)  $\frac{13}{8}$
- 157)  $\frac{1}{19}$  157) \_\_\_\_\_  
 A)  $\frac{1}{19}$                       B) No reciprocal                      C) 19                      D) 1
- 158) 9 158) \_\_\_\_\_  
 A) 1                      B) No reciprocal                      C)  $\frac{1}{9}$                       D) 9
- 159)  $\frac{12}{11}$  159) \_\_\_\_\_  
 A)  $\frac{11}{12}$                       B)  $\frac{1}{12}$                       C) 11                      D)  $\frac{1}{11}$

Divide. Write the answer in lowest terms and as a whole or mixed number where possible.

160)  $\frac{5}{4} \div \frac{2}{5}$

160) \_\_\_\_\_

A)  $3\frac{1}{8}$

B) 10

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

D)  $\frac{1}{20}$

161)  $\frac{1}{2} \div \frac{7}{5}$

161) \_\_\_\_\_

A)  $\frac{5}{14}$

B)  $2\frac{1}{2}$

C)  $2\frac{4}{5}$

D)  $\frac{1}{7}$

162)  $\frac{1}{6} \div \frac{5}{6}$

162) \_\_\_\_\_

A) 5

B)  $\frac{1}{5}$

C)  $1\frac{1}{5}$

D)  $\frac{5}{6}$

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

163) \_\_\_\_\_

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

B) 10

C)  $1\frac{1}{5}$

D)  $\frac{1}{10}$

164)  $\frac{1}{5} \div \frac{7}{8}$

164) \_\_\_\_\_

A)  $\frac{8}{35}$

B)  $4\frac{3}{8}$

C)  $\frac{7}{40}$

D)  $5\frac{5}{7}$

165)  $\frac{4}{9} \div \frac{6}{5}$

165) \_\_\_\_\_

A)  $1\frac{7}{8}$

B)  $\frac{8}{15}$

C)  $\frac{10}{27}$

D)  $2\frac{7}{10}$

166)  $\frac{1}{3} \div \frac{1}{6}$

166) \_\_\_\_\_

A) 18

B)  $\frac{1}{18}$

C) 2

D)  $\frac{1}{2}$

167)  $\frac{5}{13} \div \frac{15}{52}$

167) \_\_\_\_\_

A)  $\frac{75}{676}$

B)  $1\frac{1}{3}$

C)  $6\frac{2}{3}$

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

168)

$$\frac{\frac{5}{6}}{\frac{1}{6}}$$

A) 5

B)  $\frac{1}{2}$ C)  $\frac{5}{6}$ D)  $\frac{5}{36}$ 

168) \_\_\_\_\_

169)

$$\frac{\frac{5}{12}}{\frac{5}{18}}$$

A)  $1\frac{1}{2}$ B)  $\frac{25}{216}$ C)  $\frac{2}{3}$ D)  $7\frac{1}{2}$ 

169) \_\_\_\_\_

170)  $4 \div \frac{2}{5}$ 

A) 10

B)  $\frac{1}{10}$ C)  $1\frac{3}{5}$ 

D) 2

170) \_\_\_\_\_

171)  $12 \div \frac{2}{7}$ A)  $\frac{1}{42}$ 

B) 12

C) 42

D)  $3\frac{3}{7}$ 

171) \_\_\_\_\_

172)  $15 \div \frac{3}{5}$ 

A) 5

B) 25

C)  $\frac{1}{25}$ 

D) 9

172) \_\_\_\_\_

173)  $4 \div \frac{3}{8}$ A)  $1\frac{1}{2}$ B)  $\frac{1}{12}$ C)  $\frac{3}{32}$ D)  $10\frac{2}{3}$ 

173) \_\_\_\_\_

174)  $\frac{7}{8} \div 8$ A)  $\frac{1}{7}$ B)  $\frac{7}{64}$ 

C) 7

D)  $\frac{1}{64}$ 

174) \_\_\_\_\_

175)  $\frac{1}{2} \div 8$ A)  $\frac{1}{16}$ 

B) 2

C) 16

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

175) \_\_\_\_\_

176)  $\frac{15}{7} \div 5$  176) \_\_\_\_\_

A)  $2\frac{1}{3}$                       B)  $10\frac{5}{7}$                       C)  $\frac{3}{7}$                       D) 3

177)  $\frac{\frac{24}{2}}{\frac{2}{5}}$  177) \_\_\_\_\_

A) 60                      B) 24                      C)  $\frac{1}{60}$                       D)  $9\frac{3}{5}$

178)  $\frac{\frac{18}{3}}{\frac{3}{5}}$  178) \_\_\_\_\_

A)  $10\frac{4}{5}$                       B) 6                      C)  $\frac{1}{30}$                       D) 30

179)  $\frac{\frac{8}{7}}{2}$  179) \_\_\_\_\_

A)  $\frac{4}{7}$                       B)  $2\frac{2}{7}$                       C) 4                      D)  $1\frac{3}{4}$

**Solve the problem.**

180) A land developer wants to develop 20 acres of land. Each lot in the development is to be  $\frac{1}{4}$  of an acre. How many lots will the land developer have in the 20 acres? 180) \_\_\_\_\_

A) 80 lots                      B)  $\frac{5}{16}$  lot                      C) 5 lot(s)                      D)  $3\frac{1}{5}$  lots

181) A box of cereal contains about 12 cups. A serving size is  $\frac{3}{4}$  cup. About how many servings are in the box of cereal? 181) \_\_\_\_\_

A) 16 servings                      B)  $3\frac{3}{4}$  servings                      C)  $5\frac{1}{3}$  servings                      D) 9 servings

182) A bag of chips weighs 24 ounces. A serving size is  $\frac{3}{4}$  ounce. How many servings are in the bag of chips? 182) \_\_\_\_\_

A) 18 servings                      B)  $6\frac{3}{4}$  servings                      C) 32 servings                      D)  $9\frac{1}{3}$  servings

- 183) A bottle of ketchup has a net weight of 22 ounces. A serving size is  $\frac{1}{2}$  ounce. How many servings are in the bottle of ketchup? 183) \_\_\_\_\_  
 A) 11 servings                      B) 24 servings                      C)  $22\frac{1}{2}$  servings                      D) 44 servings
- 184) A child's dose of medicine is  $\frac{1}{6}$  of a pre-measured dose cup. If the bottle of medicine is the size of 8 dose cups, how many children's doses are there in the bottle? 184) \_\_\_\_\_  
 A)  $8\frac{1}{6}$  doses                      B) 14 doses                      C) 48 doses                      D)  $1\frac{1}{3}$  dose(s)
- 185) A worker has readings that take  $\frac{2}{3}$  minute each to read and record. How many readings can be completed in 36 minutes? 185) \_\_\_\_\_  
 A) 24 readings                      B) 12 readings                      C) 14 readings                      D) 54 readings
- 186) The floor of a rectangular room is to be tiled with  $\frac{1}{3}$ -foot square tiles along a 10-foot wall. How many tiles will be needed along the wall? 186) \_\_\_\_\_  
 A)  $3\frac{1}{3}$  tiles                      B)  $10\frac{1}{3}$  tiles                      C) 31 tiles                      D) 30 tiles
- 187) A piece of cheese weighing  $\frac{4}{5}$  pound is to be divided into 6 equal portions. What will be the weight of each portion? 187) \_\_\_\_\_  
 A)  $4\frac{4}{5}$  pound(s)                      B)  $\frac{2}{15}$  pound                      C)  $\frac{3}{10}$  pound(s)                      D)  $7\frac{1}{2}$  pounds
- 188) A piece of cable which is  $\frac{3}{5}$  m long is to be cut into pieces  $\frac{1}{20}$  m long. How many pieces will there be? 188) \_\_\_\_\_  
 A) 12 pieces                      B)  $\frac{1}{12}$  piece                      C) 100 pieces                      D) 60 pieces
- 189) The recipe for a chocolate chip cake calls for  $\frac{5}{7}$  pound of chocolate chips. If a bakery wants to make 28 cakes, how many pounds of chocolate chips will they need? 189) \_\_\_\_\_  
 A)  $5\frac{3}{5}$  pounds                      B) 4 pounds                      C) 25 pounds                      D) 20 pounds
- 190) An upholsterer wants to reupholster 160 chairs for a banquet hall. If each chair needs  $\frac{1}{8}$  pound of brass tacks, how many pounds of brass tacks are needed? 190) \_\_\_\_\_  
 A) 1280 pounds                      B) 2 pounds                      C) 128 pounds                      D) 20 pounds



191) A mechanic uses on average  $\frac{3}{2}$  gallon(s) of gear lube to service each tractor differential. Find the number of tractors that can be serviced with 6 gallons of gear lube. 191) \_\_\_\_\_  
 A) 9 tractors                      B) 2 tractors                      C) 18 tractors                      D) 4 tractors

192) A building contractor finds that  $\frac{3}{5}$  can of pipe joint compound is needed to plumb each new home. How many homes can be plumbed with 24 cans of compound? 192) \_\_\_\_\_  
 A) 24 homes                      B)  $14\frac{2}{5}$  homes                      C) 40 homes                      D) 30 homes

193) Joe has traveled  $\frac{5}{6}$  of his total trip. If the trip is a total of 678 miles, how many miles has he gone? 193) \_\_\_\_\_  
 A)  $282\frac{1}{2}$  miles                      B)  $94\frac{1}{6}$  miles                      C) 565 miles                      D) 113 miles

194) Susan has been working on a job that will require 63 hours to complete. If she has completed  $\frac{6}{7}$  of the job, how many hours has she worked? 194) \_\_\_\_\_  
 A)  $7\frac{5}{7}$  hours                      B) 27 hours                      C) 9 hours                      D) 54 hours

195) A scarf manufacturer requires  $\frac{3}{5}$  yard of fabric for each scarf produced. Find the number of scarves that can be made from 888 yards of fabric. 195) \_\_\_\_\_  
 A) 355 scarves                      B) 1480 scarves                      C) 533 scarves                      D) 2220 scarves

196) Each patient will receive  $\frac{7}{10}$  vial of medication. How many patients can be treated with 4550 vials of medication? 196) \_\_\_\_\_  
 A) 6500 patients                      B) 3185 patients                      C) 650 patients                      D) 6370 patients

**Multiply to find the exact answer. Express the answer as a whole or mixed number when possible and simplify.**

197)  $3\frac{3}{7} \cdot 1\frac{3}{4}$  197) \_\_\_\_\_  
 A) 6                      B)  $3\frac{9}{28}$                       C) 7                      D) 9

198)  $3\frac{1}{5} \cdot 6\frac{1}{4}$  198) \_\_\_\_\_  
 A) 21                      B) 24                      C)  $18\frac{4}{20}$                       D) 20

199)  $6\frac{2}{3} \cdot 3\frac{3}{4}$  199) \_\_\_\_\_  
 A) 16                      B) 24                      C) 18                      D) 25

200)  $1\frac{3}{7} \cdot 14$  200) \_\_\_\_\_  
 A) 98                      B) 14                      C) 20                      D)  $15\frac{3}{7}$

201)  $5 \cdot 6\frac{9}{20}$  201) \_\_\_\_\_  
 A)  $11\frac{1}{4}$                       B)  $32\frac{3}{4}$                       C)  $32\frac{1}{4}$                       D)  $30\frac{9}{20}$

202)  $5 \cdot 3\frac{1}{15}$  202) \_\_\_\_\_  
 A)  $15\frac{1}{15}$                       B) 15                      C)  $15\frac{1}{3}$                       D)  $14\frac{1}{3}$

203)  $2\frac{2}{9} \cdot \frac{3}{8}$  203) \_\_\_\_\_  
 A)  $\frac{3}{6}$                       B)  $2\frac{6}{72}$                       C)  $\frac{5}{6}$                       D)  $2\frac{5}{6}$

204)  $1\frac{1}{4} \cdot \frac{1}{7} \cdot \frac{4}{5}$  204) \_\_\_\_\_  
 A)  $\frac{1}{35}$                       B)  $\frac{1}{7}$                       C)  $\frac{2}{5}$                       D)  $\frac{2}{7}$

205)  $1 \cdot 5\frac{2}{9} \cdot \frac{3}{5}$  205) \_\_\_\_\_  
 A)  $2\frac{2}{15}$                       B)  $3\frac{1}{15}$                       C)  $3\frac{2}{15}$                       D)  $2\frac{3}{15}$

206)  $4\frac{1}{5} \cdot 1 \cdot \frac{4}{7}$  206) \_\_\_\_\_  
 A)  $4\frac{7}{20}$                       B)  $4\frac{2}{5}$                       C)  $5\frac{2}{5}$                       D)  $2\frac{2}{5}$

**Divide to find the exact answer. Express the answer as a whole or mixed number when possible and simplify.**

207)  $3\frac{5}{7} \div 1\frac{4}{9}$  207) \_\_\_\_\_  
 A)  $2\frac{4}{7}$                       B)  $2\frac{5}{7}$                       C)  $2\frac{4}{6}$                       D)  $3\frac{4}{7}$

208)  $2\frac{4}{5} \div 1\frac{5}{7}$  208) \_\_\_\_\_  
 A)  $1\frac{19}{29}$                       B)  $2\frac{19}{30}$                       C)  $1\frac{20}{30}$                       D)  $1\frac{19}{30}$

- 209)  $5\frac{1}{8} \div 2\frac{1}{4}$  209) \_\_\_\_\_  
A)  $2\frac{5}{18}$  B)  $2\frac{5}{17}$  C)  $2\frac{6}{18}$  D)  $3\frac{5}{18}$
- 210)  $4\frac{4}{9} \div 3\frac{1}{5}$  210) \_\_\_\_\_  
A)  $1\frac{8}{18}$  B)  $2\frac{7}{18}$  C)  $1\frac{7}{18}$  D)  $1\frac{7}{17}$
- 211)  $45 \div 1\frac{1}{2}$  211) \_\_\_\_\_  
A) 31 B) 30 C) 29 D)  $28\frac{1}{2}$
- 212)  $3\frac{6}{7} \div 9$  212) \_\_\_\_\_  
A)  $\frac{3}{6}$  B)  $\frac{3}{7}$  C)  $\frac{2}{7}$  D)  $\frac{4}{7}$
- 213)  $3\frac{1}{9} \div \frac{4}{9}$  213) \_\_\_\_\_  
A) 8 B)  $5\frac{1}{2}$  C) 6 D) 7

Refer to the following recipe to first estimate the answer and then use multiplication or division to find the exact answer. Simplify.

**Old Grandma's Fork Cookies**

$1\frac{1}{2}$  cups brown sugar

$1\frac{1}{2}$  cups white sugar

$1\frac{1}{4}$  cups shortening

1 pinch salt

3 eggs

$2\frac{1}{2}$  tsp soda

$2\frac{1}{4}$  tsp cream of tartar

$1\frac{1}{2}$  tsp vanilla

**Cream sugars and shortening. Beat in remaining ingredients. Add flour to stiffen like regular cookie dough. Roll into balls, then flatten with a fork. Cook until brown.**

214) If the recipe is tripled, how much soda will be needed? 214) \_\_\_\_\_

A) Estimate: 9 tbsp

Exact:  $7\frac{1}{2}$  tbsp

B) Estimate: 6 tsp

Exact:  $6\frac{3}{4}$  tsp

C) Estimate: 9 tsp

Exact:  $7\frac{1}{2}$  tsp

D) Estimate:  $7\frac{1}{2}$  tsp

Exact: 9 tsp

215) Find the amount of vanilla needed if the recipe is halved. 215) \_\_\_\_\_

A) Estimate:  $\frac{3}{4}$  tsp

Exact: 1 tsp

B) Estimate:  $\frac{1}{2}$  tsp

Exact:  $1\frac{1}{2}$  tsp

C) Estimate: 2 tsp

Exact: 3 tsp

D) Estimate: 1 tsp

Exact:  $\frac{3}{4}$  tsp

216) Find the amount of white sugar needed if you take  $2\frac{1}{2}$  times the recipe. 216) \_\_\_\_\_

A) Estimate: 3 cups

Exact: 3 cups

B) Estimate: 4 cups

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

C) Estimate:  $3\frac{3}{4}$  cups

Exact: 5 cups

D) Estimate: 6 cups

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



224) It requires  $1\frac{1}{4}$  cups of concentrate per quart of water to make a certain juice. How many cups are needed to make  $7\frac{3}{4}$  quarts of juice? 224) \_\_\_\_\_

- A)  $6\frac{1}{5}$  cups                      B) 155 cups                      C)  $9\frac{11}{16}$  cups                      D)  $38\frac{3}{4}$  cups

225) A car traveled 249 miles on  $8\frac{3}{10}$  gallons of gas. How many miles per gallon did it get? 225) \_\_\_\_\_

- A) 30 mpg                      B) 31                      C) 31 mpg                      D)  $31\frac{1}{8}$  mpg

**Provide an appropriate response.**

226) When the numerator is the same as the denominator, for example  $\frac{9}{9}$ , the fraction is called a(n) \_\_\_\_\_ fraction. 226) \_\_\_\_\_

- A) whole                      B) uncommon                      C) proper                      D) improper

227) A proper fraction has the form  $\frac{x}{10}$ . What is the largest possible number that x can be? 227) \_\_\_\_\_

- A) 11                      B) 5                      C) 9                      D) 10

228) You are asked to change  $16\frac{8}{11}$  to an improper fraction. What should be your first step? 228) \_\_\_\_\_

- A) Multiply 8 and 16.                      B) Multiply 11 and 16.  
C) Divide 8 by 11.                      D) Add 16 and 8.

229) You are asked to change  $\frac{18}{13}$  to a mixed number. What should be your first step? 229) \_\_\_\_\_

- A) Divide 18 by 13.                      B) Multiply 18 and 13.  
C) Divide 13 by 18.                      D) Add 18 and 13.

230) A prime number has exactly \_\_\_\_\_ factor(s). 230) \_\_\_\_\_

- A) 0                      B) 3                      C) 1                      D) 2

231) The only consecutive whole numbers that are both prime numbers are \_\_\_\_\_ and \_\_\_\_\_. 231) \_\_\_\_\_

- A) 0 and 1                      B) 1 and 2                      C) 6 and 7                      D) 2 and 3

232) One way to determine if two fractions are equivalent is to use \_\_\_\_\_. 232) \_\_\_\_\_

- A) simplification                      B) equivalent terms  
C) common factors                      D) the method of prime factors

233) Multiply two fractions by \_\_\_\_\_ the numerators and \_\_\_\_\_ the denominators. 233) \_\_\_\_\_

- A) adding; multiplying                      B) multiplying; adding  
C) multiplying; multiplying                      D) multiplying; canceling



## Answer Key

Testname: UNTITLED2

- 1) B
- 2) B
- 3) D
- 4) A
- 5) C
- 6) A
- 7) A
- 8) B
- 9) B
- 10) D
- 11) C
- 12) D
- 13) B
- 14) D
- 15) A
- 16) D
- 17) B
- 18) B
- 19) C
- 20) A
- 21) D
- 22) C
- 23) D
- 24) B
- 25) A
- 26) D
- 27) C
- 28) C
- 29) A
- 30) C
- 31) C
- 32) D
- 33) A
- 34) B
- 35) D
- 36) B
- 37) C
- 38) D
- 39) A
- 40) A
- 41) B
- 42) A
- 43) B
- 44) A
- 45) B
- 46) C
- 47) D
- 48) D
- 49) B
- 50) A



## Answer Key

Testname: UNTITLED2

- 51) A
- 52) D
- 53) C
- 54) D
- 55) D
- 56) A
- 57) C
- 58) B
- 59) B
- 60) B
- 61) B
- 62) A
- 63) B
- 64) A
- 65) B
- 66) D
- 67) B
- 68) A
- 69) C
- 70) A
- 71) D
- 72) B
- 73) C
- 74) C
- 75) A
- 76) A
- 77) A
- 78) C
- 79) B
- 80) B
- 81) A
- 82) A
- 83) C
- 84) B
- 85) B
- 86) A
- 87) B
- 88) D
- 89) D
- 90) A
- 91) B
- 92) A
- 93) A
- 94) B
- 95) A
- 96) D
- 97) B
- 98) D
- 99) C
- 100) A

## Answer Key

Testname: UNTITLED2

- 101) B
- 102) B
- 103) A
- 104) A
- 105) B
- 106) C
- 107) C
- 108) B
- 109) C
- 110) C
- 111) A
- 112) C
- 113) D
- 114) B
- 115) B
- 116) D
- 117) A
- 118) D
- 119) A
- 120) C
- 121) C
- 122) B
- 123) A
- 124) D
- 125) C
- 126) D
- 127) A
- 128) D
- 129) A
- 130) D
- 131) B
- 132) B
- 133) C
- 134) A
- 135) C
- 136) A
- 137) A
- 138) A
- 139) A
- 140) D
- 141) A
- 142) A
- 143) B
- 144) C
- 145) D
- 146) D
- 147) A
- 148) B
- 149) C
- 150) A

## Answer Key

Testname: UNTITLED2

- 151) C
- 152) A
- 153) D
- 154) D
- 155) A
- 156) D
- 157) C
- 158) C
- 159) A
- 160) A
- 161) A
- 162) B
- 163) A
- 164) A
- 165) C
- 166) C
- 167) B
- 168) A
- 169) A
- 170) A
- 171) C
- 172) B
- 173) D
- 174) B
- 175) A
- 176) C
- 177) A
- 178) D
- 179) A
- 180) A
- 181) A
- 182) C
- 183) D
- 184) C
- 185) D
- 186) D
- 187) B
- 188) A
- 189) D
- 190) D
- 191) D
- 192) C
- 193) C
- 194) D
- 195) B
- 196) A
- 197) A
- 198) D
- 199) D
- 200) C

## Answer Key

Testname: UNTITLED2

- 201) C
- 202) C
- 203) C
- 204) B
- 205) C
- 206) D
- 207) A
- 208) D
- 209) A
- 210) C
- 211) B
- 212) B
- 213) D
- 214) C
- 215) D
- 216) D
- 217) C
- 218) B
- 219) A
- 220) C
- 221) C
- 222) D
- 223) B
- 224) C
- 225) A
- 226) D
- 227) C
- 228) B
- 229) A
- 230) D
- 231) D
- 232) D
- 233) C
- 234) C
- 235) B