

0.2 Practice - Fractions

Simplify each. Leave your answer as an improper fraction.

1) $\frac{42}{12}$

2) $\frac{25}{20}$

3) $\frac{35}{25}$

4) $\frac{24}{9}$

5) $\frac{54}{36}$

6) $\frac{30}{24}$

7) $\frac{45}{36}$

8) $\frac{36}{27}$

9) $\frac{27}{18}$

10) $\frac{48}{18}$

11) $\frac{40}{16}$

12) $\frac{48}{42}$

13) $\frac{63}{18}$

14) $\frac{16}{12}$

15) $\frac{80}{60}$

16) $\frac{72}{48}$

17) $\frac{72}{60}$

18) $\frac{126}{108}$

19) $\frac{36}{24}$

20) $\frac{160}{140}$

Find each product.

21) $(9)(\frac{8}{9})$

22) $(-2)(-\frac{5}{8})$

23) $(2)(-\frac{2}{9})$

24) $(-2)(\frac{1}{3})$

25) $(-2)(\frac{13}{8})$

26) $(\frac{3}{2})(\frac{1}{2})$

27) $(-\frac{6}{5})(-\frac{11}{8})$

28) $(-\frac{3}{7})(-\frac{11}{8})$

29) $(8)(\frac{1}{2})$

30) $(-2)(-\frac{9}{7})$

31) $(\frac{2}{3})(\frac{3}{4})$

32) $(-\frac{17}{9})(-\frac{3}{5})$

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

34) $(\frac{17}{9})(-\frac{3}{5})$

35) $(\frac{1}{2})(-\frac{7}{5})$

36) $(\frac{1}{2})(\frac{5}{7})$

0.2 Practice - Fractions

Simplify each. Leave your answer as an improper fraction.

1) $\frac{42}{12} = \frac{7}{2}$

3) $\frac{35}{25} = \frac{7}{5}$

5) $\frac{54}{36} = \frac{3}{2}$

7) $\frac{45}{36} = \frac{5}{4}$

9) $\frac{27}{18} = \frac{3}{2}$

11) $\frac{40}{16} = \frac{5}{2}$

13) $\frac{63}{18} = \frac{7}{2}$

15) $\frac{80}{60} = \frac{4}{3}$

17) $\frac{72}{60} = \frac{6}{5}$

19) $\frac{36}{24} = \frac{3}{2}$

2) $\frac{25}{20} = \frac{5}{4}$

4) $\frac{24}{9} = \frac{8}{3}$

6) $\frac{30}{24} = \frac{5}{4}$

8) $\frac{36}{27} = \frac{4}{3}$

10) $\frac{48}{18} = \frac{8}{3}$

12) $\frac{48}{42} = \frac{8}{7}$

14) $\frac{16}{12} = \frac{4}{3}$

16) $\frac{72}{48} = \frac{3}{2}$

18) $\frac{126}{108} = \frac{7}{6}$

20) $\frac{160}{140} = \frac{8}{7}$

Find each product.

21) $(9)(\frac{8}{9}) = 8$

23) $(2)(-\frac{2}{9}) = -\frac{4}{9}$

25) $(-2)(\frac{13}{8}) = -\frac{26}{8} \rightarrow -\frac{13}{4}$

27) $(-\frac{6}{5})(-\frac{11}{8}) = \frac{33}{20}$

29) $(8)(\frac{1}{2}) = 4$

31) $(\frac{2}{3})(\frac{3}{4}) = \frac{1}{2}$

33) $(2)(\frac{3}{2}) = 3$

35) $(\frac{1}{2})(-\frac{7}{5}) = -\frac{7}{10}$

22) $(-2)(-\frac{5}{6}) = \frac{5}{3}$

24) $(-2)(\frac{1}{3}) = -\frac{2}{3}$

26) $(\frac{3}{2})(\frac{1}{2}) = \frac{3}{4}$

28) $(-\frac{3}{7})(-\frac{11}{8}) = \frac{33}{56}$

30) $(-2)(-\frac{9}{7}) = \frac{18}{7}$

32) $(-\frac{17}{8})(-\frac{3}{5}) = \frac{51}{40}$

34) $(\frac{17}{9})(-\frac{3}{5}) = -\frac{17}{15}$

36) $(\frac{1}{2})(\frac{5}{7}) = \frac{5}{14}$

Find each quotient.

37) $-2 \div \frac{7}{4}$

39) $\frac{-1}{9} \div \frac{-1}{2}$

41) $\frac{-3}{2} \div \frac{13}{7}$

43) $-1 \div \frac{2}{3}$

45) $\frac{8}{9} \div \frac{1}{5}$

47) $\frac{-9}{7} \div \frac{1}{5}$

49) $\frac{-2}{9} \div \frac{-3}{2}$

51) $\frac{1}{10} \div \frac{3}{2}$

38) $\frac{-12}{7} \div \frac{-9}{5}$

40) $-2 \div \frac{-3}{2}$

42) $\frac{5}{3} \div \frac{7}{5}$

44) $\frac{10}{9} \div -6$

46) $\frac{1}{6} \div \frac{-5}{3}$

48) $\frac{-13}{8} \div \frac{-15}{8}$

50) $\frac{-4}{5} \div \frac{-13}{8}$

52) $\frac{5}{3} \div \frac{5}{3}$

Evaluate each expression.

53) $\frac{1}{3} + (-\frac{4}{3})$

55) $\frac{3}{7} - \frac{1}{7}$

57) $\frac{11}{6} + \frac{7}{6}$

59) $\frac{3}{5} + \frac{5}{4}$

61) $\frac{2}{5} + \frac{5}{4}$

63) $\frac{9}{8} + (-\frac{2}{7})$

65) $1 + (-\frac{1}{3})$

67) $(-\frac{1}{2}) + \frac{3}{2}$

69) $\frac{1}{5} + \frac{3}{4}$

71) $(-\frac{5}{7}) - \frac{15}{8}$

73) $6 - \frac{8}{7}$

75) $\frac{3}{2} - \frac{15}{8}$

77) $(-\frac{15}{8}) + \frac{5}{3}$

79) $(-1) - (-\frac{1}{6})$

81) $\frac{5}{3} - (-\frac{1}{3})$

54) $\frac{1}{7} + (-\frac{11}{7})$

56) $\frac{1}{3} + \frac{5}{3}$

58) $(-2) + (-\frac{15}{8})$

60) $(-1) - \frac{2}{3}$

62) $\frac{12}{7} - \frac{9}{7}$

64) $(-2) + \frac{5}{6}$

66) $\frac{1}{2} - \frac{11}{6}$

68) $\frac{11}{8} - \frac{1}{2}$

70) $\frac{6}{5} - \frac{8}{5}$

72) $(-\frac{1}{3}) + (-\frac{8}{5})$

74) $(-6) + (-\frac{5}{3})$

76) $(-1) - (-\frac{1}{3})$

78) $\frac{3}{2} + \frac{9}{7}$

80) $(-\frac{1}{2}) - (-\frac{3}{5})$

82) $\frac{9}{7} - (-\frac{5}{3})$

Find each quotient.

37) $-2 \div \frac{7}{4} = -2 \cdot \frac{4}{7} = \frac{-8}{7}$

39) $\frac{-1}{9} \div \frac{-1}{2} = \frac{-1}{9} \cdot \frac{2}{1} = \frac{2}{9}$

41) $\frac{-3}{2} \div \frac{13}{7} = \frac{-3}{2} \cdot \frac{7}{13} = \frac{-21}{26}$

43) $-1 \div \frac{2}{3} = -1 \cdot \frac{3}{2} = \frac{-3}{2}$

45) $\frac{8}{9} \div \frac{1}{5} = \frac{8}{9} \cdot \frac{5}{1} = \frac{40}{9}$

47) $\frac{-9}{7} \div \frac{1}{5} = \frac{-9}{7} \cdot \frac{5}{1} = \frac{-45}{7}$

49) $\frac{-2}{9} \div \frac{-3}{2} = \frac{-2}{9} \cdot \frac{2}{-3} = \frac{4}{27}$

51) $\frac{1}{10} \div \frac{3}{2} = \frac{1}{10} \cdot \frac{2}{3} = \frac{2}{15}$

38) $\frac{-12}{7} \div \frac{-9}{5} = \frac{-12}{7} \cdot \frac{5}{-9} = \frac{20}{21}$

40) $-2 \div \frac{-3}{2} = -2 \cdot \frac{2}{-3} = \frac{4}{3}$

42) $\frac{5}{3} \div \frac{7}{5} = \frac{5}{3} \cdot \frac{5}{7} = \frac{25}{21}$

44) $\frac{10}{9} \div -6 = \frac{10}{9} \cdot \frac{1}{-6} = \frac{-10}{54} = \frac{-5}{27}$

46) $\frac{1}{6} \div \frac{-5}{3} = \frac{1}{6} \cdot \frac{3}{-5} = \frac{-1}{10}$

48) $\frac{-13}{8} \div \frac{-15}{8} = \frac{-13}{8} \cdot \frac{8}{-15} = \frac{13}{15}$

50) $\frac{-4}{5} \div \frac{-13}{8} = \frac{-4}{5} \cdot \frac{8}{-13} = \frac{32}{65}$

52) $\frac{5}{3} \div \frac{5}{3} = \frac{5}{3} \cdot \frac{3}{5} = 1$

Evaluate each expression.

53) $\frac{1}{3} + (-\frac{4}{3}) = \frac{-3}{3} = -1$

55) $\frac{3}{7} - \frac{1}{7} = \frac{2}{7}$

57) $\frac{11}{6} + \frac{7}{6} = \frac{18}{6} = 3$

59) $\frac{3}{5} + \frac{5}{4} = \frac{12}{20} + \frac{25}{20} = \frac{37}{20}$

61) $\frac{2}{5} + \frac{5}{4} = \frac{8}{20} + \frac{25}{20} = \frac{33}{20}$

63) $\frac{9}{8} + (-\frac{2}{7}) = \frac{63}{56} - \frac{16}{56} = \frac{47}{56}$

65) $1 + (-\frac{1}{3}) = \frac{2}{3}$

67) $(-\frac{1}{2}) + \frac{3}{2} = \frac{2}{2} = 1$

69) $\frac{1}{5} + \frac{3}{4} = \frac{4}{20} + \frac{15}{20} = \frac{19}{20}$

71) $(-\frac{5}{7}) - \frac{15}{8} = \frac{-40}{56} - \frac{105}{56} = \frac{-145}{56}$

73) $6 - \frac{8}{7} = \frac{42}{7} - \frac{8}{7} = \frac{34}{7}$

75) $\frac{3}{2} - \frac{15}{8} = \frac{12}{8} - \frac{15}{8} = \frac{-3}{8}$

77) $(-\frac{15}{8}) + \frac{5}{3} = \frac{-45}{24} + \frac{40}{24} = \frac{-5}{24}$

79) $(-1) - (-\frac{1}{6}) = \frac{-6}{6} + \frac{1}{6} = \frac{-5}{6}$

81) $\frac{5}{3} + (-\frac{1}{3}) = \frac{4}{3}$

54) $\frac{1}{7} + (-\frac{11}{7}) = \frac{-10}{7}$

56) $\frac{1}{3} + \frac{5}{3} = \frac{6}{3} = 2$

58) $(-2) + (-\frac{15}{8}) = \frac{-16}{8} - \frac{15}{8} = \frac{-31}{8}$

60) $(-1) - \frac{2}{3} = \frac{-3}{3} - \frac{2}{3} = \frac{-5}{3}$

62) $\frac{12}{7} - \frac{9}{7} = \frac{3}{7}$

64) $(-2) + \frac{5}{6} = \frac{-12}{6} + \frac{5}{6} = \frac{-7}{6}$

66) $\frac{1}{2} - \frac{11}{6} = \frac{3}{6} - \frac{11}{6} = \frac{-8}{6} = \frac{-4}{3}$

68) $\frac{11}{8} - \frac{1}{2} = \frac{11}{8} - \frac{4}{8} = \frac{7}{8}$

70) $\frac{6}{5} - \frac{8}{5} = \frac{-2}{5}$

72) $(-\frac{1}{3}) + (-\frac{8}{5}) = \frac{-5}{15} - \frac{24}{15} = \frac{-29}{15}$

74) $(-6) + (-\frac{5}{3}) = \frac{-18}{3} - \frac{5}{3} = \frac{-23}{3}$

76) $(-1) - (-\frac{1}{3}) = \frac{-3}{3} + \frac{1}{3} = \frac{-2}{3}$

78) $\frac{3}{2} + \frac{9}{7} = \frac{21}{14} + \frac{18}{14} = \frac{39}{14}$

80) $(-\frac{1}{2}) \div (-\frac{3}{5}) = \frac{-5}{10} \cdot \frac{5}{-3} = \frac{25}{30} = \frac{5}{6}$

82) $\frac{9}{7} - (-\frac{5}{3}) = \frac{27}{21} + \frac{35}{21} = \frac{62}{21}$

Name : _____

Score : _____

Teacher : _____

Date : _____

Reducing Fractions

1) $\frac{2}{6} =$ _____

11) $\frac{9}{18} =$ _____

2) $\frac{90}{100} =$ _____

12) $\frac{12}{24} =$ _____

3) $\frac{4}{10} =$ _____

13) $\frac{10}{20} =$ _____

4) $\frac{15}{20} =$ _____

14) $\frac{8}{12} =$ _____

5) $\frac{40}{100} =$ _____

15) $\frac{5}{25} =$ _____

6) $\frac{5}{10} =$ _____

16) $\frac{4}{8} =$ _____

7) $\frac{20}{30} =$ _____

17) $\frac{15}{50} =$ _____

8) $\frac{24}{30} =$ _____

18) $\frac{40}{50} =$ _____

9) $\frac{21}{35} =$ _____

19) $\frac{6}{18} =$ _____

10) $\frac{6}{8} =$ _____

20) $\frac{6}{12} =$ _____



Name : Key

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Reducing Fractions

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

11) $\frac{9}{18} = \frac{1}{2}$

2) $\frac{90}{100} = \frac{9}{10}$

12) $\frac{12}{24} = \frac{1}{2}$

3) $\frac{4}{10} = \frac{2}{5}$

13) $\frac{10}{20} = \frac{1}{2}$

4) $\frac{15}{20} = \frac{3}{4}$

14) $\frac{8}{12} = \frac{2}{3}$

5) $\frac{40}{100} = \frac{2}{5}$

15) $\frac{5}{25} = \frac{1}{5}$

6) $\frac{5}{10} = \frac{1}{2}$

16) $\frac{4}{8} = \frac{1}{2}$

7) $\frac{20}{30} = \frac{2}{3}$

17) $\frac{15}{50} = \frac{3}{10}$

8) $\frac{24}{30} = \frac{4}{5}$

18) $\frac{40}{50} = \frac{4}{5}$

9) $\frac{21}{35} = \frac{3}{5}$

19) $\frac{6}{18} = \frac{1}{3}$

10) $\frac{6}{8} = \frac{3}{4}$

20) $\frac{6}{12} = \frac{1}{2}$



Name : _____

Score : _____

(10) (4)

Teacher : _____

Date : _____

Reducing Fractions

1) $\frac{45}{99} =$ _____

11) $\frac{28}{40} =$ _____

2) $\frac{18}{36} =$ _____

12) $\frac{24}{72} =$ _____

3) $\frac{16}{48} =$ _____

13) $\frac{4}{16} =$ _____

4) $\frac{4}{8} =$ _____

14) $\frac{7}{14} =$ _____

5) $\frac{18}{72} =$ _____

15) $\frac{56}{72} =$ _____

6) $\frac{10}{20} =$ _____

16) $\frac{2}{22} =$ _____

7) $\frac{9}{45} =$ _____

17) $\frac{10}{25} =$ _____

8) $\frac{5}{35} =$ _____

18) $\frac{21}{30} =$ _____

9) $\frac{40}{56} =$ _____

19) $\frac{20}{30} =$ _____

10) $\frac{56}{63} =$ _____

20) $\frac{21}{24} =$ _____



Name : Key

Score : 10

Teacher : _____

Date : _____

Reducing Fractions

1) $\frac{45}{99} = \frac{5}{9}$

11) $\frac{28}{40} = \frac{7}{10}$

2) $\frac{18}{36} = \frac{1}{2}$

12) $\frac{24}{72} = \frac{1}{3}$

3) $\frac{16}{48} = \frac{1}{3}$

13) $\frac{4}{16} = \frac{1}{4}$

4) $\frac{4}{8} = \frac{1}{2}$

14) $\frac{7}{14} = \frac{1}{2}$

5) $\frac{18}{72} = \frac{1}{4}$

15) $\frac{56}{72} = \frac{7}{9}$

6) $\frac{10}{20} = \frac{1}{2}$

16) $\frac{2}{22} = \frac{1}{11}$

7) $\frac{9}{45} = \frac{1}{5}$

17) $\frac{10}{25} = \frac{2}{5}$

8) $\frac{5}{35} = \frac{1}{7}$

18) $\frac{21}{30} = \frac{7}{10}$

9) $\frac{40}{56} = \frac{5}{7}$

19) $\frac{20}{30} = \frac{2}{3}$

10) $\frac{56}{63} = \frac{8}{9}$

20) $\frac{21}{24} = \frac{7}{8}$



Add Fractions (A)

Find equivalent fractions using the least common denominator (LCD).

Add.

Change to a mixed number if necessary.

Reduce the fraction if necessary.

$$\frac{6}{9} + \frac{1}{2} = \frac{12}{18} + \frac{9}{18} = \frac{21}{18} = 1 \frac{3}{18} = 1 \frac{1}{6}$$

LCD: 18

$$\frac{10}{12} + \frac{4}{9} =$$

$$\frac{4}{5} + \frac{1}{2} =$$

$$\frac{2}{10} + \frac{6}{11} =$$

$$\frac{2}{8} + \frac{3}{5} =$$

$$\frac{1}{5} + \frac{9}{11} =$$

$$\frac{5}{6} + \frac{6}{10} =$$

$$\frac{1}{2} + \frac{10}{12} =$$

$$\frac{5}{7} + \frac{3}{10} =$$

$$\frac{2}{10} + \frac{2}{4} =$$

Add Fractions (A)

Find equivalent fractions using the least common denominator (LCD).

Add.

Change to a mixed number if necessary.

Reduce the fraction if necessary.

$$\frac{6}{9} + \frac{1}{2} = \frac{12}{18} + \frac{9}{18} = \frac{21}{18} = 1 \frac{3}{18} = 1 \frac{1}{6}$$

LCD: 18

$$\frac{10}{12} + \frac{4}{9} = \frac{30}{36} + \frac{16}{36} = \frac{46}{36} = \frac{23}{18}$$

$$\frac{4}{5} + \frac{1}{2} = \frac{8}{10} + \frac{5}{10} = \frac{13}{10}$$

$$\frac{2}{10} + \frac{6}{11} = \frac{22}{110} + \frac{60}{110} = \frac{82}{110} = \frac{41}{55}$$

$$\frac{2}{8} + \frac{3}{5} = \frac{10}{40} + \frac{24}{40} = \frac{34}{40} = \frac{17}{20}$$

$$\frac{1}{5} + \frac{9}{11} = \frac{11}{55} + \frac{45}{55} = \frac{56}{55}$$

$$\frac{5}{6} + \frac{6}{10} = \frac{25}{30} + \frac{18}{30} = \frac{43}{30}$$

$$\frac{1}{2} + \frac{10}{12} = \frac{6}{12} + \frac{10}{12} = \frac{16}{12} = \frac{4}{3}$$

$$\frac{5}{7} + \frac{3}{10} = \frac{50}{70} + \frac{21}{70} = \frac{71}{70}$$

$$\frac{2}{10} + \frac{2}{4} = \frac{4}{20} + \frac{10}{20} = \frac{14}{20} = \frac{7}{10}$$

Name : _____

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Date : _____

Adding Fractions

1) $\frac{1}{3} + \frac{4}{12} =$

2) $\frac{1}{16} + \frac{1}{8} =$

3) $\frac{3}{13} + \frac{3}{26} =$

4) $\frac{8}{13} + \frac{9}{26} =$

5) $\frac{1}{13} + \frac{9}{26} =$

6) $\frac{2}{3} + \frac{11}{18} =$

7) $\frac{7}{10} + \frac{4}{5} =$

8) $\frac{12}{14} + \frac{2}{7} =$

9) $\frac{1}{4} + \frac{2}{5} =$

10) $\frac{7}{8} + \frac{10}{24} =$

11) $\frac{4}{11} + \frac{10}{22} =$

12) $\frac{1}{3} + \frac{7}{9} =$

13) $\frac{4}{18} + \frac{2}{3} =$

14) $\frac{3}{6} + \frac{2}{3} =$

15) $\frac{5}{7} + \frac{12}{28} =$



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Adding Fractions

$$1) \quad \frac{1}{3 \cdot 4} + \frac{4}{12} = \frac{4}{12} + \frac{4}{12} = \frac{8}{12} = \frac{2}{3}$$

$$2) \quad \frac{1}{16} + \frac{1}{8} = \frac{1}{16} + \frac{2}{16} = \frac{3}{16}$$

$$3) \quad \frac{3}{13 \cdot 2} + \frac{3}{26} = \frac{6}{26} + \frac{3}{26} = \frac{9}{26}$$

$$4) \quad \frac{8}{13 \cdot 2} + \frac{9}{26} = \frac{16}{26} + \frac{9}{26} = \frac{25}{26}$$

$$5) \quad \frac{1}{13} + \frac{9}{26} = \frac{2}{26} + \frac{9}{26} = \frac{11}{26}$$

$$6) \quad \frac{2 \cdot 6}{3 \cdot 6} + \frac{11}{18} = \frac{12}{18} + \frac{11}{18} = \frac{23}{18}$$

$$7) \quad \frac{7}{10} + \frac{4 \cdot 2}{5 \cdot 2} = \frac{7}{10} + \frac{8}{10} = \frac{15}{10} = \frac{3}{2}$$

$$8) \quad \frac{12}{14} + \frac{2 \cdot 2}{7 \cdot 2} = \frac{12}{14} + \frac{4}{14} = \frac{16}{14} = \frac{8}{7}$$

$$9) \quad \frac{1}{4 \cdot 5} + \frac{2}{5 \cdot 4} = \frac{5}{20} + \frac{8}{20} = \frac{13}{20}$$

$$10) \quad \frac{7}{8} + \frac{10}{24} = \frac{21}{24} + \frac{10}{24} = \frac{31}{24}$$

$$11) \quad \frac{4}{11} + \frac{10}{22} = \frac{8}{22} + \frac{10}{22} = \frac{18}{22} = \frac{9}{11}$$

$$12) \quad \frac{1}{3} + \frac{7}{9} = \frac{3}{9} + \frac{7}{9} = \frac{10}{9}$$

$$13) \quad \frac{4}{18} + \frac{2 \cdot 6}{3 \cdot 6} = \frac{4}{18} + \frac{12}{18} = \frac{16}{18} = \frac{8}{9}$$

$$14) \quad \frac{3}{6} + \frac{2}{3 \cdot 2} = \frac{3}{6} + \frac{4}{6} = \frac{7}{6}$$

$$15) \quad \frac{5}{7 \cdot 4} + \frac{12}{28} = \frac{20}{28} + \frac{12}{28} = \frac{32}{28} = \frac{8}{7}$$

