

7th Grade

Parent Information

April 13-24

- Recommended daily math practice time: 30-40 minutes
- There are 13 “skills practice” pages – Recommendation is to work 15-20 problems per day from pages of your child’s choice. However, the goal is practice and remembering how to work problems correctly. Adjust the number of problems based on how long it takes your child to complete.
- Answer keys are at the end of the document.

Addition and Subtraction with Rational Numbers—Skills Practice

Name: _____

Add integers.

Form A

1 $-5 + (-3) =$ _____

2 $14 + (-4) + 6 + (-16) =$ _____

3 $9 + (-4) =$ _____

4 $15 + (-7) + (-3) =$ _____

5 $-17 + 16 =$ _____

6 $-18 + (-17) =$ _____

7 $14 + (-16) =$ _____

8 $-16 + (-7) + (-4) =$ _____

9 $-19 + 36 =$ _____

10 $19 + 13 + (-9) =$ _____

11 $-17 + 14 + 7 + 10 =$ _____

12 $-12 + (-7) =$ _____

13 $-8 + 14 + (-2) + 6 =$ _____

14 $-17 + (-19) =$ _____

15 $79 + (-24) =$ _____

16 $23 + 14 + (-3) =$ _____

17 $-8 + 11 =$ _____

18 $-9 + 43 + (-11) =$ _____

19 $-6 + 12 + (-12) + 6 =$ _____

20 $16 + (-26) =$ _____

21 $45 + (-33) =$ _____

22 $18 + 19 + (-8) + (-19) + 7 =$ _____

23 $15 + (-3) + (-2) + 11 + 9 =$ _____

24 $7 + (-14) + (-6) + 13 + 4 =$ _____

Addition and Subtraction with Rational Numbers—Skills Practice

Name: _____

Subtract integers.

Form A

1 $-8 - (-14) = \underline{\quad}$

2 $-8 - 4 - (-8) = \underline{\quad}$

3 $17 - (-8) = \underline{\quad}$

4 $6 - (-7) - (-3) - 16 = \underline{\quad}$

5 $-12 - 4 = \underline{\quad}$

6 $-13 - (-7) = \underline{\quad}$

7 $6 - (-3) = \underline{\quad}$

8 $-5 - (-17) - (-5) = \underline{\quad}$

9 $-62 - (-11) = \underline{\quad}$

10 $-4 - 8 - 16 = \underline{\quad}$

11 $-8 - 15 = \underline{\quad}$

12 $4 - 17 - (-6) - 3 = \underline{\quad}$

13 $11 - (-15) = \underline{\quad}$

14 $-46 - 21 = \underline{\quad}$

15 $41 - (-13) - 21 = \underline{\quad}$

16 $14 - (-17) = \underline{\quad}$

17 $55 - (-29) - (-45) = \underline{\quad}$

18 $8 - (-14) - (-2) - 4 = \underline{\quad}$

19 $6 - 7 - (-4) - 3 = \underline{\quad}$

20 $-25 - 25 = \underline{\quad}$

21 $30 - (-15) - 40 = \underline{\quad}$

22 $-7 - (-14) - 4 - (-27) - 5 = \underline{\quad}$

23 $-12 - (-7) - (-19) - (-13) - (-2) = \underline{\quad}$

24 $-11 - (-5) - 9 - (-13) - (-5) = \underline{\quad}$

25 $8 - (-3) - 10 - (-12) - (-7) = \underline{\quad}$

Addition and Subtraction with Rational Numbers—Skills Practice

Name: _____

Add rational numbers.

Form A

1 $-7.25 + 8.67 =$ _____

2 $-\frac{5}{6} + 7 + \left(-\frac{1}{6}\right) =$ _____

3 $-5 + \frac{1}{4} =$ _____

4 $9 + (-10.2) =$ _____

5 $-\frac{1}{8} + \left(-\frac{7}{8}\right) =$ _____

6 $-\frac{5}{8} + \left(-\frac{1}{8}\right) + \frac{3}{4} =$ _____

7 $15.4 + (-16) =$ _____

8 $-1\frac{2}{5} + \frac{4}{5} =$ _____

9 $-8 + \left(-3\frac{1}{2}\right) =$ _____

10 $-18.04 + 7.9 =$ _____

11 $-11 + (-4.25) =$ _____

12 $-\frac{5}{6} + \left(-\frac{5}{6}\right) =$ _____

13 $\frac{2}{3} + \left(-\frac{1}{3}\right) =$ _____

14 $5.3 + (-16.4) =$ _____

15 $1\frac{3}{4} + \left(-\frac{1}{2}\right) + \left(-\frac{1}{4}\right) =$ _____

16 $-5.75 + 10 =$ _____

17 $-8.9 + (-7.2) + 18.9 =$ _____

18 $-4.2 + (-3.7) =$ _____

19 $3.5 + (-13.5) + (-5.6) =$ _____

20 $-3\frac{1}{6} + (-8) =$ _____

Addition and Subtraction with Rational Numbers—Skills Practice

Name: _____

Add and subtract rational numbers.

Form A

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

2 $-16.5 - 11 =$ _____

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

4 $7.75 - 14.25 =$ _____

5 $-8\frac{1}{3} - (-4) =$ _____

6 $-15.7 - (-16.2) =$ _____

7 $8.7 - (-5.2) =$ _____

8 $6\frac{5}{6} - 9\frac{1}{6} =$ _____

9 $6.2 - (-6.8) =$ _____

10 $11.92 - 4.5 =$ _____

11 $2\frac{1}{4} - 8\frac{1}{2} + 7\frac{3}{4} =$ _____

12 $4.2 - 17.6 + 5.8 =$ _____

13 $-12.6 + 4.2 - (-2.6) =$ _____

14 $-5\frac{2}{5} - 8\frac{4}{5} + 15\frac{2}{5} =$ _____

15 $-6.5 + 11 - (-6.5) =$ _____

16 $\frac{1}{6} - (-7) + 3 - (-\frac{5}{6}) =$ _____

17 $\frac{1}{4} - 1\frac{3}{4} + 2\frac{3}{4} - (-2\frac{3}{4}) =$ _____

18 $-6.1 - 6 - (-6.1) + 16 =$ _____

19 $1.25 - 2.75 - (-3.75) + (-7.25) =$ _____

20 $8\frac{1}{5} - \frac{3}{5} + (-\frac{4}{5}) - (-1\frac{2}{5}) =$ _____

Multiplication and Division with Rational Numbers—Skills Practice

Name: _____

Multiply rational numbers.

Form A

1 $-\frac{3}{5} \times \left(-\frac{5}{8}\right) =$ _____

2 $2 \times (-5) \times 3 \times (-4) =$ _____

3 $-0.2 \times (-0.4) =$ _____

4 $-\frac{1}{6} \times \frac{5}{6} =$ _____

5 $-9 \times (-4) =$ _____

6 $-8 \times 7 =$ _____

7 $0.2 \times (-0.05) \times 0.3 =$ _____

8 $-0.6 \times 0.03 =$ _____

9 $6 \times (-6) =$ _____

10 $-\frac{1}{5} \times \frac{3}{5} \times \frac{4}{5} =$ _____

11 $-\frac{1}{4} \times \left(-\frac{3}{4}\right) =$ _____

12 $-0.5 \times 0.4 \times 0.3 =$ _____

13 $0.5 \times (-0.7) =$ _____

14 $-7 \times (-3) \times (-4) =$ _____

15 $-7 \times (-4) =$ _____

16 $\frac{1}{3} \times \left(-\frac{2}{3}\right) =$ _____

17 $5 \times (-8) =$ _____

18 $-2 \times -6 \times -3 =$ _____

19 $-10 \times 14 =$ _____

20 $-\frac{5}{8} \times \frac{2}{5} \times \left(-\frac{1}{4}\right) =$ _____

21 $100 \times (-9) =$ _____

22 $-\frac{1}{4} \times \frac{3}{2} \times \frac{1}{2} =$ _____

23 $-0.5 \times 0.1 \times (-0.2) \times (-0.4) =$ _____

24 $-\frac{1}{2} \times \frac{3}{2} \times \frac{5}{2} \times \left(-\frac{1}{2}\right) =$ _____

Multiplication and Division with Rational Numbers—Skills Practice

Name: _____

Divide rational numbers.

Form A

1 $-\frac{1}{3} \div \left(-\frac{1}{6}\right) =$ _____

2 $56 \div (-8) =$ _____

3 $-3.6 \div 0.1 =$ _____

4 $-\frac{1}{2} \div \frac{1}{8} =$ _____

5 $-44 \div (-4) =$ _____

6 $-9.8 \div (-1) =$ _____

7 $\frac{1}{6} \div \left(-\frac{1}{6}\right) =$ _____

8 $6.4 \div (-2) =$ _____

9 $35 \div (-5) =$ _____

10 $-\frac{3}{4} \div \left(-\frac{1}{2}\right) =$ _____

11 $-90 \div 9 =$ _____

12 $\frac{2}{5} \div \left(-\frac{2}{3}\right) =$ _____

13 $-8.9 \div 10 =$ _____

14 $-36 \div (-3) =$ _____

15 $-24 \div (-0.2) =$ _____

16 $-\frac{5}{3} \div \frac{5}{6} =$ _____

17 $-100 \div (-50) =$ _____

18 $5.5 \div (-0.5) =$ _____

19 $\frac{1}{8} \div \left(-\frac{1}{5}\right) =$ _____

20 $-7.5 \div (-2.5) =$ _____

21 $-32 \div 4 =$ _____

22 $-3.6 \div 1.2 =$ _____

23 $-42 \div (-6) =$ _____

24 $-\frac{1}{3} \div \left(-\frac{1}{3}\right) =$ _____

Expressing Rational Numbers as Decimals—Skills Practice

Name: _____

Write fractions as decimals.

Form A

1 $-\frac{4}{5} =$ _____

2 $-\frac{1}{2} =$ _____

3 $-\frac{5}{9} =$ _____

4 $-\frac{2}{3} =$ _____

5 $-\frac{2}{9} =$ _____

6 $\frac{2}{5} =$ _____

7 $\frac{9}{2} =$ _____

8 $\frac{5}{3} =$ _____

9 $-\frac{7}{5} =$ _____

10 $-\frac{1}{4} =$ _____

11 $-\frac{10}{9} =$ _____

12 $\frac{3}{2} =$ _____

13 $\frac{7}{2} =$ _____

14 $-\frac{8}{5} =$ _____

15 $\frac{5}{6} =$ _____

16 $-\frac{11}{4} =$ _____

17 $\frac{5}{12} =$ _____

18 $\frac{7}{6} =$ _____

19 $-\frac{5}{8} =$ _____

20 $\frac{5}{4} =$ _____

21 $\frac{9}{8} =$ _____

Using Properties of Operations— Skills Practice

Name: _____

Write an equivalent expression without parentheses, and combine terms if possible.

Form A

1 $5x + 6x =$ _____

2 $6n - 3(2n - 5) =$ _____

3 $0.5(-12p - 4) =$ _____

4 $\frac{1}{4}y + \frac{3}{4}(y - 8) =$ _____

5 $4(x - 6) + 30 =$ _____

6 $-8\left(m + \frac{1}{4}\right) =$ _____

7 $-8x - 4x + 3x + 2 =$ _____

8 $4.5a + 7 + 3.5a + 2 =$ _____

9 $-4 + 7y - 3y - 5 =$ _____

10 $\frac{1}{6}(12n + 36) =$ _____

11 $3(y + 7) - 5y =$ _____

12 $9y - 4x + 3y + 4x =$ _____

13 $8(6a + 7) =$ _____

14 $\frac{1}{6}y + 6 - \frac{7}{6}y - 4 =$ _____

15 $\frac{3}{2}x - \frac{1}{2}(x + 4) =$ _____

16 $6 + 2x + 4(x + 5) =$ _____

17 $-8(x + 3) =$ _____

18 $3y + 3(y - 2.5) =$ _____

19 $9\left(-\frac{1}{3}m + 4\right) - 6m =$ _____

20 $6.25m + 9 + 3.75m - 12 =$ _____

Using Properties of Operations— Skills Practice

Name: _____

Use the distributive property to write the expression as a product.

Form A

1 $7x + 7 =$ _____

2 $6y + 14 - 8y =$ _____

3 $25x - 5 =$ _____

4 $16y + (-4) =$ _____

5 $4 - 8y =$ _____

6 $-8x - 16 =$ _____

7 $-11x - 44 =$ _____

8 $10 + 70x =$ _____

9 $10 - (-4y) =$ _____

10 $-2x + 12 - 4x =$ _____

11 $-25y + (-55) =$ _____

12 $20y - (-5) =$ _____

13 $-21x + 14 =$ _____

14 $18x - 33 =$ _____

15 $4y + 22 + 7y =$ _____

16 $-7 + (-21x) =$ _____

17 $6 + (-12y) =$ _____

18 $-5x + 33 + 16x =$ _____

19 $15y - 35 =$ _____

20 $-40y + 100 =$ _____

Two-Step Equations—Skills Practice

Name: _____

Solve equations of form $px + q = r$ with integers.

Form A

1 $6x + 6 = 0$

2 $-3x + 9 = 6$

3 $5x + 4 = -6$

4 $-275 = 25x - 50$

5 $90 = 20x - 10$

6 $46 = 3x + 19$

7 $-15x - 45 = -45$

8 $12x - 14 = -38$

9 $97 = 10x + 27$

10 $-6x - 13 = 35$

11 $-127 = -50x + 23$

12 $8x + 5 = -3$

13 $7x + 4 = -38$

14 $-4x - 52 = -152$

15 $-8 = -6x - 2$

16 $-25 = 10x - 25$

Two-Step Equations—Skills Practice

Name: _____

Solve equations of form $px + q = r$ with rational numbers.

Form A

1 $-3x + 6 = 9.9$

2 $8\frac{3}{5} = -4x + 5\frac{3}{5}$

3 $1.2x + 5.3 = 0.5$

4 $-\frac{1}{4}x + 6 = 10$

5 $7 = 11 - 0.2x$

6 $0.4x + 15 = 39.8$

7 $1\frac{3}{8} = \frac{1}{4}x + 1$

8 $\frac{2}{3}x - 4 = 36$

9 $\frac{1}{5} = \frac{7}{5} - \frac{1}{10}x$

10 $-8.2 = -7.1 + 11x$

11 $-13\frac{3}{4} = -\frac{7}{10}x + \frac{1}{4}$

12 $\frac{1}{8}x + \frac{3}{4} = \frac{1}{4}$

13 $-5.6x + 8.8 = 3.2$

14 $8x - 4\frac{2}{3} = 19\frac{1}{3}$

Two-Step Equations—Skills Practice

Name: _____

Solve equations of form $p(x + q) = r$ with integers.

Form A

1 $6(x + 4) = 36$

2 $21 = 7(x + 3)$

3 $56 = -8(x + 9)$

4 $2(x - 6) = -26$

5 $-4(x - 5) = -44$

6 $5(x + 4) = 35$

7 $-6(x - 12) = 48$

8 $-9 = -9(x + 4)$

9 $10(x - 15) = -70$

10 $-2(x - 13) = 18$

11 $-36 = 12(x + 7)$

12 $-7(x + 7) = 49$

13 $3(x - 6) = 24$

14 $-24 = 4(x - 6)$

15 $-11(x + 2) = -66$

16 $8(x - 14) = 64$

Two-Step Equations—Skills Practice

Name: _____

Solve equations of form $p(x + q) = r$ with rational numbers.

Form A

1 $-\frac{1}{8}(x + 6) = \frac{1}{8}$

2 $0.25(p + 8) = 2$

3 $-0.2(w - 6) = -4$

4 $\frac{2}{5}(y + 5) = \frac{4}{5}$

5 $-6.9 = 3(x + 4.6)$

6 $-25(p - 7) = -2.5$

7 $\frac{1}{3} = \frac{1}{6}(m - 9)$

8 $4.5 = 5(x + 3)$

9 $10(x - 24.2) = 50$

10 $\frac{1}{4}(n + 2) = -\frac{5}{2}$

11 $11(x - 0.4) = 44$

12 $20 = \frac{5}{6}(m + 8)$

13 $-\frac{1}{5}(y + 2) = 4$

14 $7.6 = 2(n + 5.7)$

Addition and Subtraction with Rational Numbers—Skills Practice

Name: Answer Key

Form A

Add integers.

1 $-5 + (-3) = -8$

2 $14 + (-4) + 6 + (-16) = 0$

3 $9 + (-4) = 5$

4 $15 + (-7) + (-3) = 5$

5 $-17 + 16 = -1$

6 $-18 + (-17) = -35$

7 $14 + (-16) = -2$

8 $-16 + (-7) + (-4) = -27$

9 $-19 + 36 = 17$

10 $19 + 13 + (-9) = 23$

11 $-17 + 14 + 7 + 10 = 14$

12 $-12 + (-7) = -19$

13 $-8 + 14 + (-2) + 6 = 10$

14 $-17 + (-19) = -36$

15 $79 + (-24) = 55$

16 $23 + 14 + (-3) = 34$

17 $-8 + 11 = 3$

18 $-9 + 43 + (-11) = 23$

19 $-6 + 12 + (-12) + 6 = 0$

20 $16 + (-26) = -10$

21 $45 + (-33) = 12$

22 $18 + 19 + (-8) + (-19) + 7 = 17$

23 $15 + (-3) + (-2) + 11 + 9 = 30$

24 $7 + (-14) + (-6) + 13 + 4 = 4$

Addition and Subtraction with Rational Numbers—Skills Practice

Name: Answer Key

Form A

Subtract integers.

1 $-8 - (-14) = \underline{6}$

2 $-8 - 4 - (-8) = \underline{-4}$

3 $17 - (-8) = \underline{25}$

4 $6 - (-7) - (-3) - 16 = \underline{0}$

5 $-12 - 4 = \underline{-16}$

6 $-13 - (-7) = \underline{-6}$

7 $6 - (-3) = \underline{9}$

8 $-5 - (-17) - (-5) = \underline{17}$

9 $-62 - (-11) = \underline{-51}$

10 $-4 - 8 - 16 = \underline{-28}$

11 $-8 - 15 = \underline{-23}$

12 $4 - 17 - (-6) - 3 = \underline{-10}$

13 $11 - (-15) = \underline{26}$

14 $-46 - 21 = \underline{-67}$

15 $41 - (-13) - 21 = \underline{33}$

16 $14 - (-17) = \underline{31}$

17 $55 - (-29) - (-45) = \underline{129}$

18 $8 - (-14) - (-2) - 4 = \underline{20}$

19 $6 - 7 - (-4) - 3 = \underline{0}$

20 $-25 - 25 = \underline{-50}$

21 $30 - (-15) - 40 = \underline{5}$

22 $-7 - (-14) - 4 - (-27) - 5 = \underline{25}$

23 $-12 - (-7) - (-19) - (-13) - (-2) = \underline{29}$

24 $-11 - (-5) - 9 - (-13) - (-5) = \underline{3}$

25 $8 - (-3) - 10 - (-12) - (-7) = \underline{20}$

Addition and Subtraction with Rational Numbers—Skills Practice

Name: Answer Key

Form A

Add rational numbers.

1 $-7.25 + 8.67 = \underline{1.42}$

2 $-\frac{5}{6} + 7 + \left(-\frac{1}{6}\right) = \underline{6}$

3 $-5 + \frac{1}{4} = \underline{-4\frac{3}{4}}$

4 $9 + (-10.2) = \underline{-1.2}$

5 $-\frac{1}{8} + \left(-\frac{7}{8}\right) = \underline{-1}$

6 $-\frac{5}{8} + \left(-\frac{1}{8}\right) + \frac{3}{4} = \underline{0}$

7 $15.4 + (-16) = \underline{-0.6}$

8 $-1\frac{2}{5} + \frac{4}{5} = \underline{-\frac{3}{5}}$

9 $-8 + \left(-3\frac{1}{2}\right) = \underline{-11\frac{1}{2}}$

10 $-18.04 + 7.9 = \underline{-10.14}$

11 $-11 + (-4.25) = \underline{-15.25}$

12 $-\frac{5}{6} + \left(-\frac{5}{6}\right) = \underline{-1\frac{2}{3}}$

13 $\frac{2}{3} + \left(-\frac{1}{3}\right) = \underline{\frac{1}{3}}$

14 $5.3 + (-16.4) = \underline{-11.1}$

15 $1\frac{3}{4} + \left(-\frac{1}{2}\right) + \left(-\frac{1}{4}\right) = \underline{1}$

16 $-5.75 + 10 = \underline{4.25}$

17 $-8.9 + (-7.2) + 18.9 = \underline{2.8}$

18 $-4.2 + (-3.7) = \underline{-7.9}$

19 $3.5 + (-13.5) + (-5.6) = \underline{-15.6}$

20 $-3\frac{1}{6} + (-8) = \underline{-11\frac{1}{6}}$

Addition and Subtraction with Rational Numbers—Skills Practice

Name: Answer Key

Form A

Add and subtract rational numbers.

1 $4\frac{3}{4} - (-2\frac{1}{4}) = \underline{7}$

2 $-16.5 - 11 = \underline{-27.5}$

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

4 $7.75 - 14.25 = \underline{-6.5}$

5 $-8\frac{1}{3} - (-4) = \underline{-4\frac{1}{3}}$

6 $-15.7 - (-16.2) = \underline{0.5}$

7 $8.7 - (-5.2) = \underline{13.9}$

8 $6\frac{5}{6} - 9\frac{1}{6} = \underline{-2\frac{1}{3} \text{ or } -\frac{7}{3}}$

9 $6.2 - (-6.8) = \underline{13}$

10 $11.92 - 4.5 = \underline{7.42}$

11 $2\frac{1}{4} - 8\frac{1}{2} + 7\frac{3}{4} = \underline{1\frac{1}{2}}$

12 $4.2 - 17.6 + 5.8 = \underline{-7.6}$

13 $-12.6 + 4.2 - (-2.6) = \underline{-5.8}$

14 $-5\frac{2}{5} - 8\frac{4}{5} + 15\frac{2}{5} = \underline{1\frac{1}{5}}$

15 $-6.5 + 11 - (-6.5) = \underline{11}$

16 $\frac{1}{6} - (-7) + 3 - (-\frac{5}{6}) = \underline{11}$

17 $\frac{1}{4} - 1\frac{3}{4} + 2\frac{3}{4} - (-2\frac{3}{4}) = \underline{4}$

18 $-6.1 - 6 - (-6.1) + 16 = \underline{10}$

19 $1.25 - 2.75 - (-3.75) + (-7.25) = \underline{-5}$

20 $8\frac{1}{5} - \frac{3}{5} + (-\frac{4}{5}) - (-1\frac{2}{5}) = \underline{8\frac{1}{5}}$

Multiplication and Division with Rational Numbers—Skills Practice

Name: _____

Answer Key

Form A

Multiply rational numbers.

1 $-\frac{3}{5} \times \left(-\frac{5}{8}\right) = \frac{15}{40}$ or $\frac{3}{8}$

2 $2 \times (-5) \times 3 \times (-4) = 120$

3 $-0.2 \times (-0.4) = 0.08$

4 $-\frac{1}{6} \times \frac{5}{6} = -\frac{5}{36}$

5 $-9 \times (-4) = 36$

6 $-8 \times 7 = -56$

7 $0.2 \times (-0.05) \times 0.3 = -0.003$

8 $-0.6 \times 0.03 = -0.018$

9 $6 \times (-6) = -36$

10 $-\frac{1}{5} \times \frac{3}{5} \times \frac{4}{5} = -\frac{12}{125}$

11 $-\frac{1}{4} \times \left(-\frac{3}{4}\right) = \frac{3}{16}$

12 $-0.5 \times 0.4 \times 0.3 = -0.06$

13 $0.5 \times (-0.7) = -0.35$

14 $-7 \times (-3) \times (-4) = -84$

15 $-7 \times (-4) = 28$

16 $\frac{1}{3} \times \left(-\frac{2}{3}\right) = -\frac{2}{9}$

17 $5 \times (-8) = -40$

18 $-2 \times -6 \times -3 = -36$

19 $-10 \times 14 = -140$

20 $-\frac{5}{8} \times \frac{2}{5} \times \left(-\frac{1}{4}\right) = \frac{10}{160}$ or $\frac{1}{16}$

21 $100 \times (-9) = -900$

22 $-\frac{1}{4} \times \frac{3}{2} \times \frac{1}{2} = -\frac{3}{16}$

23 $-0.5 \times 0.1 \times (-0.2) \times (-0.4) = -0.004$

24 $-\frac{1}{2} \times \frac{3}{2} \times \frac{5}{2} \times \left(-\frac{1}{2}\right) = \frac{15}{16}$

Multiplication and Division with Rational Numbers—Skills Practice

Name: Answer Key

Form A

Divide rational numbers.

1 $-\frac{1}{3} \div \left(-\frac{1}{6}\right) = \frac{6}{3} \text{ or } 2$

2 $56 \div (-8) = -7$

3 $-3.6 \div 0.1 = -36$

4 $-\frac{1}{2} \div \frac{1}{8} = -\frac{8}{2} \text{ or } -4$

5 $-44 \div (-4) = 11$

6 $-9.8 \div (-1) = 9.8$

7 $\frac{1}{6} \div \left(-\frac{1}{6}\right) = -\frac{6}{6} \text{ or } -1$

8 $6.4 \div (-2) = -3.2$

9 $35 \div (-5) = -7$

10 $-\frac{3}{4} \div \left(-\frac{1}{2}\right) = \frac{6}{4} \text{ or } \frac{3}{2} \text{ or } 1\frac{1}{2}$

11 $-90 \div 9 = -10$

12 $\frac{2}{5} \div \left(-\frac{2}{3}\right) = -\frac{6}{10} \text{ or } -\frac{3}{5}$

13 $-8.9 \div 10 = -0.89$

14 $-36 \div (-3) = 12$

15 $-24 \div (-0.2) = 120$

16 $-\frac{5}{3} \div \frac{5}{6} = -2$

17 $-100 \div (-50) = 2$

18 $5.5 \div (-0.5) = -11$

19 $\frac{1}{8} \div \left(-\frac{1}{5}\right) = -\frac{5}{8}$

20 $-7.5 \div (-2.5) = 3$

21 $-32 \div 4 = -8$

22 $-3.6 \div 1.2 = -3$

23 $-42 \div (-6) = 7$

24 $-\frac{1}{3} \div \left(-\frac{1}{3}\right) = 1$

Expressing Rational Numbers as Decimals—Skills Practice

Name: Answer Key

Form A

Write fractions as decimals.

1 $-\frac{4}{5} = \underline{-0.8}$

2 $-\frac{1}{2} = \underline{-0.5}$

3 $-\frac{5}{9} = \underline{-0.\overline{5}}$

4 $-\frac{2}{3} = \underline{-0.\overline{6}}$

5 $-\frac{2}{9} = \underline{-0.\overline{2}}$

6 $\frac{2}{5} = \underline{0.4}$

7 $\frac{9}{2} = \underline{4.5}$

8 $\frac{5}{3} = \underline{1.\overline{6}}$

9 $-\frac{7}{5} = \underline{-1.4}$

10 $-\frac{1}{4} = \underline{-0.25}$

11 $-\frac{10}{9} = \underline{-1.\overline{1}}$

12 $\frac{3}{2} = \underline{1.5}$

13 $\frac{7}{2} = \underline{3.5}$

14 $-\frac{8}{5} = \underline{-1.6}$

15 $\frac{5}{6} = \underline{0.8\overline{3}}$

16 $-\frac{11}{4} = \underline{-2.75}$

17 $\frac{5}{12} = \underline{0.4\overline{16}}$

18 $\frac{7}{6} = \underline{1.1\overline{6}}$

19 $-\frac{5}{8} = \underline{-0.625}$

20 $\frac{5}{4} = \underline{1.25}$

21 $\frac{9}{8} = \underline{1.125}$

Using Properties of Operations— Skills Practice

Name: Answer Key

Form A

Write an equivalent expression without parentheses, and combine terms if possible.

$$1 \quad 5x + 6x = \underline{11x}$$

$$2 \quad 6n - 3(2n - 5) = \underline{15}$$

$$3 \quad 0.5(-12p - 4) = \underline{-6p - 2}$$

$$4 \quad \frac{1}{4}y + \frac{3}{4}(y - 8) = \underline{y - 6}$$

$$5 \quad 4(x - 6) + 30 = \underline{4x + 6}$$

$$6 \quad -8\left(m + \frac{1}{4}\right) = \underline{-8m - 2}$$

$$7 \quad -8x - 4x + 3x + 2 = \underline{-9x + 2}$$

$$8 \quad 4.5a + 7 + 3.5a + 2 = \underline{8a + 9}$$

$$9 \quad -4 + 7y - 3y - 5 = \underline{4y - 9}$$

$$10 \quad \frac{1}{6}(12n + 36) = \underline{2n + 6}$$

$$11 \quad 3(y + 7) - 5y = \underline{-2y + 21}$$

$$12 \quad 9y - 4x + 3y + 4x = \underline{12y}$$

$$13 \quad 8(6a + 7) = \underline{48a + 56}$$

$$14 \quad \frac{1}{6}y + 6 - \frac{7}{6}y - 4 = \underline{-y + 2}$$

$$15 \quad \frac{3}{2}x - \frac{1}{2}(x + 4) = \underline{x - 2}$$

$$16 \quad 6 + 2x + 4(x + 5) = \underline{6x + 26}$$

$$17 \quad -8(x + 3) = \underline{-8x - 24}$$

$$18 \quad 3y + 3(y - 2.5) = \underline{6y - 7.5}$$

$$19 \quad 9\left(-\frac{1}{3}m + 4\right) - 6m = \underline{-9m + 36}$$

$$20 \quad 6.25m + 9 + 3.75m - 12 = \underline{10m - 3}$$

Using Properties of Operations— Skills Practice

Name: Answer Key

* Problems may have more than 1 answer

Use the distributive property to write the expression as a product.

Form A

1 $7x + 7 = \underline{7(x+1)}$

2 $6y + 14 - 8y = \underline{2(7-y)}$

3 $25x - 5 = \underline{5(5x-1)}$

4 $16y + (-4) = \underline{4(4y-1)}$

5 $4 - 8y = \underline{4(1-2y)}$

6 $-8x - 16 = \underline{-8(x+2)}$

7 $-11x - 44 = \underline{-11(x+4)}$

8 $10 + 70x = \underline{10(1+7x)}$

9 $10 - (-4y) = \underline{2(5+2y)}$

10 $-2x + 12 - 4x = \underline{6(2-x)}$

11 $-25y + (-55) = \underline{-5(5y+11)}$

12 $20y - (-5) = \underline{5(4y+1)}$

13 $-21x + 14 = \underline{7(-3x+2)}$

14 $18x - 33 = \underline{3(6x-11)}$

15 $4y + 22 + 7y = \underline{11(y+2)}$

16 $-7 + (-21x) = \underline{-7(1+3x)}$

17 $6 + (-12y) = \underline{6(1-2y)}$

18 $-5x + 33 + 16x = \underline{11(x+3)}$

19 $15y - 35 = \underline{5(3y-7)}$

20 $-40y + 100 = \underline{20(-2y+5)}$

Two-Step Equations—Skills Practice

Name: Answer Key

Form A

Solve equations of form $px + q = r$ with integers.

1 $6x + 6 = 0$

$$x = -1$$

2 $-3x + 9 = 6$

$$x = 1$$

3 $5x + 4 = -6$

$$x = -2$$

4 $-275 = 25x - 50$

$$x = -9$$

5 $90 = 20x - 10$

$$x = 5$$

6 $46 = 3x + 19$

$$x = 9$$

7 $-15x - 45 = -45$

$$x = 0$$

8 $12x - 14 = -38$

$$x = -2$$

9 $97 = 10x + 27$

$$x = 7$$

10 $-6x - 13 = 35$

$$x = -8$$

11 $-127 = -50x + 23$

$$x = 3$$

12 $8x + 5 = -3$

$$x = -1$$

13 $7x + 4 = -38$

$$x = -6$$

14 $-4x - 52 = -152$

$$x = 25$$

15 $-8 = -6x - 2$

$$x = 1$$

16 $-25 = 10x - 25$

$$x = 0$$

Two-Step Equations—Skills Practice

Name: _____

Answer KeySolve equations of form $px + q = r$ with rational numbers.

Form A

1 $-3x + 6 = 9.9$

$x = -1.3$

2 $8\frac{3}{5} = -4x + 5\frac{3}{5}$

$x = -\frac{3}{4}$

3 $1.2x + 5.3 = 0.5$

$x = -4$

4 $-\frac{1}{4}x + 6 = 10$

$x = -16$

5 $7 = 11 - 0.2x$

$x = 20$

6 $0.4x + 15 = 39.8$

$x = 62$

7 $1\frac{3}{8} = \frac{1}{4}x + 1$

$x = \frac{3}{2}$ or $1\frac{1}{2}$

8 $\frac{2}{3}x - 4 = 36$

$x = 60$

9 $\frac{1}{5} = \frac{7}{5} - \frac{1}{10}x$

$x = 12$

10 $-8.2 = -7.1 + 11x$

$x = -0.1$

11 $-13\frac{3}{4} = -\frac{7}{10}x + \frac{1}{4}$

$x = 20$

12 $\frac{1}{8}x + \frac{3}{4} = \frac{1}{4}$

$x = -4$

13 $-5.6x + 8.8 = 3.2$

$x = 1$

14 $8x - 4\frac{2}{3} = 19\frac{1}{3}$

$x = 3$

Two-Step Equations—Skills Practice

Name: _____

Answer Key

Form A

Solve equations of form $p(x + q) = r$ with integers.

1 $6(x + 4) = 36$

$x = 2$

2 $21 = 7(x + 3)$

$x = 0$

3 $56 = -8(x + 9)$

$x = -16$

4 $2(x - 6) = -26$

$x = -7$

5 $-4(x - 5) = -44$

$x = 16$

6 $5(x + 4) = 35$

$x = 3$

7 $-6(x - 12) = 48$

$x = 4$

8 $-9 = -9(x + 4)$

$x = -3$

9 $10(x - 15) = -70$

$x = 8$

10 $-2(x - 13) = 18$

$x = 4$

11 $-36 = 12(x + 7)$

$x = -10$

12 $-7(x + 7) = 49$

$x = -14$

13 $3(x - 6) = 24$

$x = 14$

14 $-24 = 4(x - 6)$

$x = 0$

15 $-11(x + 2) = -66$

$x = 4$

16 $8(x - 14) = 64$

$x = 22$

Two-Step Equations—Skills Practice

Name: _____

Answer Key

Form A

Solve equations of form $p(x + q) = r$ with rational numbers.

1 $-\frac{1}{8}(x + 6) = \frac{1}{8}$

$$x = -7$$

2 $0.25(p + 8) = 2$

$$p = 0$$

3 $-0.2(w - 6) = -4$

$$w = 26$$

4 $\frac{2}{5}(y + 5) = \frac{4}{5}$

$$y = -3$$

5 $-6.9 = 3(x + 4.6)$

$$x = -6.9$$

6 $-25(p - 7) = -2.5$

$$p = 7.1$$

7 $\frac{1}{3} = \frac{1}{6}(m - 9)$

$$m = 11$$

8 $4.5 = 5(x + 3)$

$$x = -2.1$$

9 $10(x - 24.2) = 50$

$$x = 29.2$$

10 $\frac{1}{4}(n + 2) = -\frac{5}{2}$

$$n = -12$$

11 $11(x - 0.4) = 44$

$$x = 4.4$$

12 $20 = \frac{5}{6}(m + 8)$

$$m = 16$$

13 $-\frac{1}{5}(y + 2) = 4$

$$y = -22$$

14 $7.6 = 2(n + 5.7)$

$$n = -1.9$$