

7th Grade Summer Math Packet

In this summer math packet you will find various problems that you should already know how to solve as you get ready to enter into the seventh grade. If you get stuck on a particular concept, there are video links located at the bottom of almost every page. If you go to the provided link, you will find a short video explaining the particular concept and how to solve problems involving that concept.

These problems should be completed without the use of a calculator and all work must be shown in order to receive full credit. The summer math packet will be due when you return from summer break. Do your absolute best and good luck! See you next year!

Concepts

Completed (X)

1. Multiplying and Dividing Whole Numbers

2. Adding and Subtracting Fractions

3. Multiplying and Dividing Fractions

4. Adding and Subtracting Decimals

5. Multiplying and Dividing Decimals

6. Adding and Subtracting Integers

7. Multiplying and Dividing Integers

8. One-Step Equations

Multiplying and Dividing Whole Numbers

1.
$$\begin{array}{r} 208 \\ \times 9 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 75 \\ \times 36 \\ \hline \end{array}$$

3. $137 \times 23 = \underline{\hspace{2cm}}$

4. $351 \times 105 = \underline{\hspace{2cm}}$

5. $4758 \div 25 = \underline{\hspace{2cm}}$

6. $4365 \div 15 = \underline{\hspace{2cm}}$

$$25 \overline{)4758}$$

$$15 \overline{)4365}$$

7. $362 \div 4 = \underline{\hspace{2cm}}$

8. $10466 \div 49 = \underline{\hspace{2cm}}$

$$\underline{\hspace{2cm}}$$

$$\underline{\hspace{2cm}}$$

Need help with the long division? Check out this video:

www.khanacademy.org/math/arithmetic/multiplication-division/long_division/v/dividing-by-a-two-digit-number

Adding and Subtracting Fractions

1. $\frac{3}{4} + \frac{5}{6} =$ _____

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

3. $5\frac{7}{8} + 3\frac{5}{12} =$ _____

4. $6 - 4\frac{2}{3} =$ _____

5. $6\frac{5}{8} + 4\frac{1}{3} =$ _____

6. $10\frac{5}{7} - 3\frac{3}{14} =$ _____

7. Ms. Anderson assigned the problem: $\frac{4}{5} - \frac{3}{4}$. Three of her students' responses are below. Who completed the problem correctly? What common mistakes did the other two students make?

Sam

$$\begin{array}{r} \frac{4}{5} - \frac{3}{4} = \frac{1}{1} \\ \\ = 1 \end{array}$$

Pat

$$\begin{array}{r} \frac{4}{5} - \frac{3}{4} = \frac{4}{20} - \frac{3}{20} \\ \\ = \frac{1}{20} \end{array}$$

Eric

$$\begin{array}{r} \frac{4}{5} - \frac{3}{4} = \frac{16}{20} - \frac{15}{20} \\ \\ = \frac{1}{20} \end{array}$$

Multiplying and Dividing Fractions

1. $\frac{3}{10} \times \frac{2}{15} =$ _____

2. $\frac{1}{4} \times \frac{5}{20} =$ _____

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

4. $4 \times 3\frac{7}{8} =$ _____

5. $\frac{3}{4} \div \frac{6}{11} =$ _____

6. $\frac{4}{5} \div \frac{5}{6} =$ _____

7. $6\frac{1}{4} \div 4\frac{3}{8} =$ _____

8. $9\frac{3}{5} \div 3 =$ _____

9. A baseball team played 35 games and won $\frac{4}{7}$ of them. How many games were won?
How many were lost?

won = _____

lost = _____

Fraction frustration? Try watching this video:

www.khanacademy.org/math/arithmetic/fractions/mixed_number_mult_div/v/dividing-mixed-numbers

Adding and Subtracting Decimals

Remember: The decimal points must be lined up!!

1.
$$\begin{array}{r} 3.5 \\ + 8.4 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 2.304 \\ 6.18 \\ + 9.2 \\ \hline \end{array}$$

3. $8.2 + 4.2$

4. $15.36 + 29.23 + 7.2$

5. $362.1 + 8.88 + 0.016$

6.
$$\begin{array}{r} 17.6 \\ - 9.3 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 3.3 \\ - 0.33 \\ \hline \end{array}$$

8. $32.3 - 12.72$

9. $12 - 4.78$

10. $29.98 - 16.09$

Confused? Try watching this video:

www.khanacademy.org/math/arithmetic/decimals/adding_decimals/v/subtracting-decimals

Multiplying and Dividing Decimals

Reminder: You must show **ALL WORK** on every page to receive credit!
(a.k.a. no calculators!!!)

1. $0.04 \times 7 =$ _____

2. $3.2 \times 0.15 =$ _____

3. $45 \times 0.028 =$ _____

4. $8.003 \times 0.06 =$ _____

5. $16.05 \div 15 =$ _____

6. $6.592 \div 2.06 =$ _____

7. $64.8 \div 18 =$ _____

8. $0.158 \div 15.8 =$ _____

Adding and Subtracting Integers

1. $-15 + 8 =$ _____

2. $-27 + -17 =$ _____

3. $-36 + 15 =$ _____

4. $-53 + -26 =$ _____

5. $22 - (-16) =$ _____

6. $14 - 16 =$ _____

7. $70 - (-23) =$ _____

8. $416 - 2150 =$ _____

Write an expression to represent each problem and then simplify.

9. An elevator started at the 18th floor. It came down 11 floors and went back up 16. At what floor was it stopped?

Expression = _____ Answer = _____

10. Suppose a mother and a child are going to the movies. A child ticket costs \$6.75. If an adult ticket costs \$3.50 more, how much does an adult ticket cost?

Expression = _____ Answer = _____

11. Sort the expressions below into the table.

$8 + (-2)$ $8 - 2$ $-8 - 2$ $-8 + 2$ $5 - (-3)$ $-7 + 1$ $-7 + -1$

Answer = 6	Answer = -6	Answer is not 6 or -6

Multiplying and Dividing Integers

1. $9(-6) =$ _____

2. $(-48) \div (-6) =$ _____

3. $(-4)(-4) =$ _____

4. $(-34) \div 2 =$ _____

5. $(-59)(-79) =$ _____

6. $(-120) \div 12 =$ _____

7. $38(-2) =$ _____

8. $(-200) \div 25 =$ _____

Use the numbers in the box to fill in the blanks and complete each equation.

-8	7	60	-7	72	-9
12	-4	-3	64	9	36

9. _____ \times 5 = _____

10. _____ \times _____ = 12

11. $-49 \div$ _____ = _____

12. _____ \div -8 = _____

13. $-4 \times$ _____ = _____

14. _____ \div 8 = _____

One-Step Equations

* Remember: You must show all your work to receive credit!*

1. $298 + n = 294$

2. $-12m = -60$

3. $e - 43 = -45$

4. $-27 = w + 14$

5. $117 = -9x$

6. $\frac{v}{-50} = 300$

7. $12 + y = -32$

8. $-2 = \frac{a}{13}$

9. $k - 36 = 37$

Write an equation and solve.

10. A number decreased by 16 is -26. Find the number.

Expression = _____ Answer = _____

11. Tim weighs five pounds more than Mitchell. Find Mitchell's weight if Tim weighs ninety-pound.

Expression = _____ Answer = _____

Need help with two step equations? www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-variables-expressions/cc-7th-2-step-equations/v/equations-2

Answer Banks: Below are answer banks for each of the pages in the packet.

The answers are all scrambled (i.e. not in order!). There are also a few extra answers in each box. Remember, these answers are to help you check your work. You must still show ALL work to receive full credit!!

Answer Bank for Multiplying and Dividing Whole Numbers

291
675
90 r 2
213 r 29
2,700
1,872
36,855
317 r 5
693
3,151
190 r 8

Answer Bank for Adding and Subtracting Fractions

$7\frac{1}{2}$
 $\frac{1}{18}$
 $2\frac{2}{3}$
 $\frac{2}{3}$
 $10\frac{23}{24}$
 $13\frac{1}{2}$
 $1\frac{1}{3}$
 $9\frac{7}{24}$
 $1\frac{7}{12}$

Answer Bank for Multiplying and Dividing Fractions

$\frac{1}{16}$
 $1\frac{3}{8}$
 $6\frac{1}{8}$
 $1\frac{3}{7}$
 $3\frac{1}{5}$
 $\frac{9}{22}$
 $7\frac{7}{8}$
 $15\frac{1}{2}$
 $\frac{1}{25}$
 $\frac{24}{25}$
 $\frac{1}{25}$
 $\frac{5}{80}$

Answer Bank for Adding and Subtracting Decimals

19.58
12.4
11.9
51.79
45.31
17.684
7.22
370.996
8.3
4.0
13.89
2.97
10.51

0.01

Answer Bank for Multiplying and Dividing Decimals

0.28

3.2

48.018

3.6

0.48

4.70

0.1

0.48018

1.07

1.26

Answer Bank for Adding and Subtracting Integers

-1,734

-93

-44

38

93

30

-79

-7

2

-21

6

-2

-93

Answer Bank for Multiplying and Dividing Integers

-8

16

-54

8

-17

4,661

-15

-8

8

-76

-10

Answer Bank for One-Step Equations

26

-2

-41

-88

-13

-20

--15,000

--26

73

5

-44

-4