



**2016 Summer Math Reinforcement Packet
for Students Entering 7th Grade
"30 Days of Math"**

Adapted from <https://www.aea267.k12.ia.us>

Reinforcing and practicing math skills learned during the school year can be exceptionally beneficial to academic growth in the Fall. The 7th grade math curriculum will expand on the knowledge and skills taught in 6th grade. Help your child be prepared by having him/her complete a set of review problems for 30 days this summer! Spending 5 – 10 minutes each day sharpening math skills will give your child the boost they need to start the year off well! Remember to show your work on this page or a separate sheet of paper!

STUDENT'S NAME: _____

Day 1 – Try to accurately complete as many multiplication facts as you can in 90 seconds. Get a parent to time you!

<u>8</u> <u>×8</u>	<u>12</u> <u>×9</u>	<u>0</u> <u>×6</u>	<u>10</u> <u>×5</u>	<u>1</u> <u>×1</u>	<u>11</u> <u>×8</u>	<u>6</u> <u>×9</u>	<u>5</u> <u>×8</u>	<u>10</u> <u>×11</u>	<u>12</u> <u>×12</u>
<u>9</u> <u>×0</u>	<u>7</u> <u>×4</u>	<u>9</u> <u>×9</u>	<u>9</u> <u>×7</u>	<u>2</u> <u>×5</u>	<u>5</u> <u>×11</u>	<u>9</u> <u>×11</u>	<u>11</u> <u>×1</u>	<u>8</u> <u>×7</u>	<u>6</u> <u>×6</u>
<u>5</u> <u>×0</u>	<u>3</u> <u>×9</u>	<u>1</u> <u>×6</u>	<u>3</u> <u>×0</u>	<u>6</u> <u>×2</u>	<u>12</u> <u>×0</u>	<u>1</u> <u>×10</u>	<u>12</u> <u>×11</u>	<u>0</u> <u>×4</u>	<u>12</u> <u>×5</u>
<u>4</u> <u>×4</u>	<u>2</u> <u>×0</u>	<u>6</u> <u>×4</u>	<u>4</u> <u>×12</u>	<u>3</u> <u>×8</u>	<u>2</u> <u>×8</u>	<u>9</u> <u>×10</u>	<u>11</u> <u>×3</u>	<u>4</u> <u>×11</u>	<u>1</u> <u>×5</u>
<u>1</u> <u>×4</u>	<u>7</u> <u>×0</u>	<u>10</u> <u>×10</u>	<u>11</u> <u>×7</u>	<u>12</u> <u>×7</u>	<u>2</u> <u>×2</u>	<u>8</u> <u>×6</u>	<u>10</u> <u>×7</u>	<u>8</u> <u>×10</u>	<u>3</u> <u>×6</u>
<u>9</u> <u>×1</u>	<u>8</u> <u>×0</u>	<u>4</u> <u>×9</u>	<u>8</u> <u>×9</u>	<u>6</u> <u>×6</u>	<u>5</u> <u>×5</u>	<u>12</u> <u>×6</u>	<u>6</u> <u>×4</u>	<u>5</u> <u>×6</u>	<u>1</u> <u>×2</u>
<u>10</u> <u>×4</u>	<u>1</u> <u>×12</u>	<u>3</u> <u>×2</u>	<u>7</u> <u>×3</u>	<u>5</u> <u>×3</u>	<u>5</u> <u>×9</u>	<u>3</u> <u>×3</u>	<u>11</u> <u>×9</u>	<u>9</u> <u>×3</u>	<u>7</u> <u>×7</u>
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Day 3

Complete each product.

$$\begin{array}{r} 31 \\ \times 67 \\ \hline \end{array}$$

$$\begin{array}{r} 89 \\ \times 47 \\ \hline \end{array}$$

$$\begin{array}{r} 99 \\ \times 23 \\ \hline \end{array}$$

$$\begin{array}{r} 52 \\ \times 21 \\ \hline \end{array}$$

$$\begin{array}{r} 31 \\ \times 50 \\ \hline \end{array}$$

$$\begin{array}{r} 91 \\ \times 56 \\ \hline \end{array}$$

$$\begin{array}{r} 55 \\ \times 22 \\ \hline \end{array}$$

$$\begin{array}{r} 47 \\ \times 19 \\ \hline \end{array}$$

$$\begin{array}{r} 60 \\ \times 34 \\ \hline \end{array}$$

$$\begin{array}{r} 47 \\ \times 84 \\ \hline \end{array}$$

$$\begin{array}{r} 99 \\ \times 44 \\ \hline \end{array}$$

$$\begin{array}{r} 42 \\ \times 49 \\ \hline \end{array}$$

$$\begin{array}{r} 47 \\ \times 16 \\ \hline \end{array}$$

$$\begin{array}{r} 91 \\ \times 89 \\ \hline \end{array}$$

$$\begin{array}{r} 39 \\ \times 97 \\ \hline \end{array}$$

Day 4

Complete each product.

$$\begin{array}{r} 798 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 485 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 626 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 885 \\ \times 9 \\ \hline \end{array}$$

$$\begin{array}{r} 757 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 911 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 234 \\ \times 7 \\ \hline \end{array}$$

$$\begin{array}{r} 697 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 907 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 928 \\ \times 4 \\ \hline \end{array}$$

$$\begin{array}{r} 941 \\ \times 6 \\ \hline \end{array}$$

$$\begin{array}{r} 957 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 301 \\ \times 2 \\ \hline \end{array}$$

$$\begin{array}{r} 299 \\ \times 8 \\ \hline \end{array}$$

$$\begin{array}{r} 913 \\ \times 6 \\ \hline \end{array}$$

Day 5

1. What is the place value of the 2 in 16.024?
2. What is $\frac{1}{3}$ of 18?
3. Solve for x : $120 - \quad = 82$
4. $6432 \div 8 = \underline{\quad}$
5. Solve for x : $\frac{2}{5} = \frac{x}{25}$
6. 8 yards = feet
7. Kay is 5' 2", Paul is 4' 8", and Kevin is 5' 8". What is the average height of the three?

Day 6

1. Find the average of Sam's test grades: 92, 85, 100, 75
2. Tom is 68 inches tall. What is this in feet and inches?
3. The group drove 504 miles on 18 gallons of gas. How many miles per gallon did they get?
4. What is the place value of the 6 in 2,645,000?
5. Solve for x : $3x = 18$
6. Solve for x : $415 + x = 820$
7. $345 \div 15 = \underline{\quad}$

Day 7

Solve for x .

1. $48 - x = 25$
2. $\frac{3}{5} = \frac{x}{45}$
3. $x + 52 = 135$
4. $\frac{1}{2} + \frac{3}{4} = x$
5. $8 - 1\frac{3}{4} = x$
6. $\frac{x}{4} = 15$
7. Add: \$144.13, \$16.25, \$12.55, \$1.08

Day 8

1. For our party we need to buy paper plates for \$1.20, napkins for \$1.50, and a cake for \$7.50. How much money will we need?
2. Abby answered 84 out of 100 questions correct on her math test. What percent did she get incorrect?

3. Simplify $\frac{8}{10}$

4. $1685 \div 20 = \underline{\quad}$

5. $85 \times 15 = \underline{\quad}$

6. Write the first five multiples of 12.

7. Solve for x : $15x = 105$

Day 9

1. Bill had \$5.42 and earned \$2.25. He spent \$3.78. How much did he have left? 2. Peppers are priced 3 for \$1.02. How much would one pepper cost? 3. For our party we need to buy paper plates for \$1.20, napkins for \$1.50, and a cake for \$7.50. How much money will we need?

4. What is the Greatest Common Factor of 12 and 18?

5. Simplify $\frac{15}{30}$

6. How many seconds are in 5 hours?

7. $75 \times 30 = \underline{\quad}$

Day 10

1. 10 is what percent of 50 ?

2. Express $\frac{4}{5}$ as a decimal.

3. Express 0.15 as a fraction in simplest form.

4. There are 5 book shelves. Each shelf holds 22 books. How many books are in the bookcase?

5. $5000 - 1472 = \underline{\quad}$

6. $200 - 68 = \underline{\quad}$

7. $8,500 - 3,425 = \underline{\quad}$

Day 11

1. $4.256 + 2.017 = \underline{\quad}$

2. $15.558 - 6.05 = \underline{\quad}$

3. $10.5 + 6.275 = \underline{\quad}$

4. $3.5 - 1.5 = \underline{\quad}$

5. $24.5 - 8.95 = \underline{\quad}$

6. Sean bought wallpaper to cover a wall, 8' by 14'. What is the area in sq. ft. that he wants to cover?

7. $62400 \div 120 = \underline{\hspace{2cm}}$

Day 12

1. Simplify $\frac{10}{14}$

2. Express $\frac{1}{4}$ as a decimal.

3. Simplify $\frac{24}{36}$

80	72	85	100	98	85
80	100	85	70	95	76

Use the data above for #4 – 7.

4. What is the range of the data?

5. What is the median of the data?

6. What is the mode of the data?

7. What is the mean of the data?

Day 13

1. One pint of salad dressing costs \$1.05. One quart costs \$2.12. Which one would be a better buy?

2. How much money? 6 quarters, 8 dimes, 5 nickels

3. $158 \times 36 = \underline{\hspace{2cm}}$

4. $28 \times 40 = \underline{\hspace{2cm}}$

5. Simplify $\frac{18}{45}$

6. What is the place value of the 4 in 234,601?

7. What is $\frac{1}{30}$ of 36?

Day 14

- Write a standard numeral for three hundred sixty-nine thousand four.
- Mr. Jones has a balance of \$5,206 in his checking account. He writes a check for \$853, makes a deposit of \$1,550, and writes another check for \$2287. How much does he have left in his checking account?
- Express 0.55 as a fraction in simplest form.
- Write 0.8 as a percent.
- Jack is 48 inches tall. What is his height in feet and inches?
- Find the average of Brian's homework grades: 90 , 85 , 100 , 0 , 90.
- $390 \div 26 = \underline{\quad}$

 Day 15

- What do you call a 5-sided polygon?
- 8 weeks = days
- $562 \times 61 = \underline{\quad}$
- $6.75 \times 10 = \underline{\quad}$
- $8.2 \div 10 = \underline{\quad}$
- Each room in the 5 room house needs to be painted. This will take 3 gallons of paint per room. If paint costs \$8.95 per gallon, how much will the paint cost?
- Tim correctly answered 18 of 20 problems. Express this as a percent.

 Day 16

- It is 12:45pm, what time will it be in 90 minutes?
- Write an algebraic expression: *three more than the number of books Kate read*

3. How much greater than 1 is $\frac{5}{4}$?
4. Solve for x : $\frac{x}{5} = 6$
5. How many eggs are in 8 dozen?
6. $689 \div 8 = \underline{\hspace{2cm}}$
7. 2 years = $\underline{\hspace{2cm}}$ weeks

Day 17

Express each improper fraction as a mixed number in simplest form.

1. $\frac{8}{3}$ 2. $\frac{5}{2}$ 3. $\frac{12}{5}$ 4. $\frac{15}{4}$
5. $\frac{35}{6}$ 6. $\frac{24}{8}$ 7. $\frac{7}{5}$

Day 18

1. A sweater costs \$36. It is on sale for $\frac{2}{3}$ of the original price. How much do you save on the price?
2. Arrange these 6 digits into the least possible 6-digit number: 4, 2, 8, 1, 7, 5
3. What is the place value of the 6 in 16.53?
4. $18 \times 2.5 = \underline{\hspace{2cm}}$
5. $5.2 \times 5 = \underline{\hspace{2cm}}$ 6. $12.75 \times 0.5 = \underline{\hspace{2cm}}$ 7. $8.2 \times 1.4 = \underline{\hspace{2cm}}$

Day 19

Solve for x .

1. $38 + x = 135$ 2. $\frac{x}{5} = 30$ 3. $\frac{1}{2}x + 8 = 18$
4. $3x + 5 = 29$ 5. $x - 85 = 240$ 6. $\frac{1}{4} + x = \frac{5}{8}$
7. $x - 28 = 35$

Day 20

1. The librarian pulled 468 books from the shelves to be rebound. She found 6 boxes to put them in to send. How many books would go in each box?
 2. $15.12 + 5.4 + 20.85 = \underline{\hspace{2cm}}$
 3. $2.75x = 22.825$
 4. Matt has some pennies. If he had 42 more, he would still have 17 less than his brother who had 169. How many did Matt have?
 5. What is the perimeter of a rectangle that is 8 inches long and 6 inches wide?
 6. $8,000 - 2,540 = \underline{\hspace{2cm}}$
 7. How much money? 16 dimes, 20 nickels, 8 pennies
-

Day 21

1. Matt has some pennies. If he had 42 more, he would still have 17 less than his brother who had 169. How many did Matt have?
 2. What number is 2,365 less than one million?
 3. The average student has 28 teeth. How many teeth in a room containing 28 students?
 4. What day of the week is 24 days from Tuesday?
 5. $3628 \div 36 = \underline{\hspace{2cm}}$
 6. $67 \times 18 = \underline{\hspace{2cm}}$
 7. $8.56 \times 0.01 = \underline{\hspace{2cm}}$
-

Day 22

1. Write the prime factorization of 162.
2. Is 39 a prime or composite number?
3. What is the Greatest Common Factor of 20 and 64?
4. $15\frac{3}{5} + 4\frac{1}{3} = \underline{\hspace{2cm}}$
5. What is 15% of 80?
6. $625 - 248 = \underline{\hspace{2cm}}$
7. Jake bought some gym shoes for \$29.89 and 2 pairs of socks for \$1.75 each. What was the total cost?

Day 23

Solve for x.

1. $\frac{1}{8} = \frac{x}{24}$

2. $\frac{3}{7} = \frac{9}{x}$

3. $\frac{3}{4} = \frac{x}{20}$

4. $\frac{8}{30} = \frac{x}{15}$

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

6. $\frac{5}{6} + \frac{1}{2} = \underline{\quad}$

7. $6 - 2\frac{3}{5} = \underline{\quad}$

Day 24

- The average of 38, 41, 42, 48 and 51 is what number?
- 462 students entered the walk-a-thon. Each student walked 16 km. How many kilometers were walked in all?
- Write the standard numeral for five hundred seventy-four thousand, sixty eight.
- Simplify $\frac{18}{21}$
- Simplify $\frac{30}{40}$
- Simplify $\frac{25}{75}$
- $248 + 352 + 625 = \underline{\quad}$

Day 25

- $37,448 - 20,856 = \underline{\quad}$
- How much money? 25 quarters, 18 dimes, 15 nickels
- What place value is the 8 in 12.098?
- $405 \times 310 = \underline{\quad}$
- Sue needed 6 pounds of apples to make pies. She bought a $4\frac{1}{3}$ pound bag and a $3\frac{1}{2}$ pound bag. How many pounds of apples did she have left making the pies?
- What is the measure of a right angle?
- What fraction of a foot is 3 inches?

Day 26

1. What is the least common multiple of 3 and 6?
2. An isosceles triangle has how many congruent sides?
3. Amy bought $1\frac{3}{4}$ dozen donuts. How many individual donuts is that?
4. Jane's car can be driven on 20 miles on one gallon of gasoline. How many miles can be driven on $3\frac{3}{4}$ gallons of gas?
5. There are 455 students in the school with 35 students in each class. How many classes?
6. What is $\frac{3}{4}$ of 18?
7. What is $\frac{4}{3}$ of 18?

Day 27

1. Which is greater? 0.06 or 0.006
2. Which is greater? 24.115 or 24.15
3. Cookies cost \$.15 each. How many cookies can be bought with \$5.40?
4. Tanya practices her clarinet 35 minutes each day. How many minutes does she practice in 2 weeks?
5. Round 1.895 to the nearest hundredth.
6. Round 8.503 to the nearest tenth.
7. A gasoline tank holds 60 liters. If 47.8 liters of gasoline filled the tank, how much gasoline was already in the tank?

Day 28

1. What is the term used to identify two shapes with the same size and same shape?
2. 25 feet = _____ yards
3. $3\frac{5}{6} + 6\frac{1}{4} = \underline{\hspace{2cm}}$
4. Lines that are perpendicular form what kind of angles?
5. What fraction of an hour is 20 minutes?
6. Teresa spent \$35 for a sweater and a blouse. The blouse cost \$16.50. How much did the sweater cost?
7. Is 53 a prime or composite number?

Day 29

1. Which is the better buy? 8 apples for \$0.59 or 12 apples for \$0.89.
2. 8 days = _____ minutes
3. What is the reciprocal of 2?
4. What percent of a dozen is 3?
5. Write $\frac{2}{5}$ as a decimal.
6. There was a sale on long stem red roses. One dozen sold for \$2.99. How much would 6 dozen cost?
7. Find the area of a triangle which has a base of 22 cm and a height of 16 cm

Day 30

1. Classify an angle that is 53° .
2. The new car costs \$8,000. If interest rates are 15% per year, what would interest be per year?
3. Blaine jogs 3 kilometers a day, 5 days a week, 50 weeks a year. How many kilometers does he jog in a year?

4. A set of 6 books on gardening costs \$41.25. A single copy of each book, bought separately, costs \$8.25. How much less is the cost per copy if you buy the set?

5. $\frac{3}{5}$ of the students in a class speak Spanish. In a class of 25, how many students would you expect to speak Spanish?

6. When it comes to math, what area do you think you need a lot more help in?

7. Name one thing you would like your teacher to know about you.