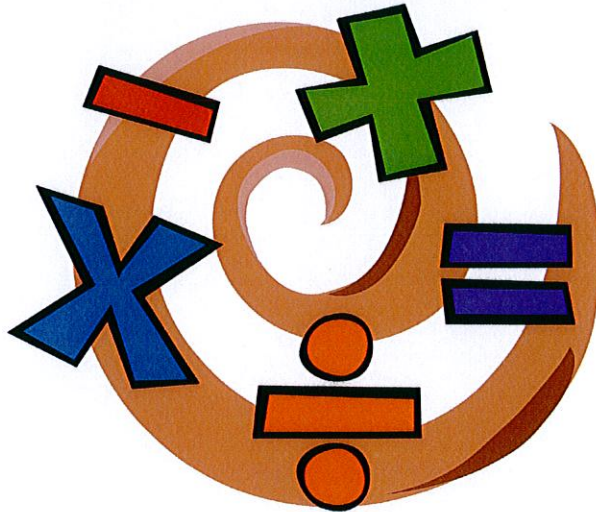


4th Grade

Math Olympics Practice Pack



Math Olympics is an advanced math program offered in grades 3-8. It is part of the ACSI Student Activities program. Students who qualify will compete with students from other local Christian schools by taking a final test in March.

This packet contains the types of problems 4th graders should learn how to solve to be ready for the Math Olympics qualifying test, which is given in December. We know that all students have different gifts and abilities and do not expect every student to be ready to do the level of math required for Math Olympics. Only 6 students per grade level will qualify to participate in Math Olympics.

Contact Mrs. Stamm if you have questions about Math Olympics.

Grade Four Computation Sample Test 1

ACSI Math Olympics

- | | | | |
|-----|-------------------------------|-----|-------|
| 1. | $4,347 - 2,742$ | 1. | _____ |
| 2. | $3,462 \times 15$ | 2. | _____ |
| 3. | $6 + (4 \times 13) + 7$ | 3. | _____ |
| 4. | $48 + 357 + 2,063 + 73$ | 4. | _____ |
| 5. | $6 \overline{)840}$ | 5. | _____ |
| 6. | $9/12 - 2/6$ | 6. | _____ |
| 7. | $32.6 + 14.7 + 31.04$ | 7. | _____ |
| 8. | $2/6 + 8/24$ | 8. | _____ |
| 9. | 357×136 | 9. | _____ |
| 10. | $2,687 + 23,432$ | 10. | _____ |
| 11. | $728.27 - 289.603$ | 11. | _____ |
| 12. | $64 \overline{)6,272}$ | 12. | _____ |
| 13. | $(8 \times 6) + (4 \times 6)$ | 13. | _____ |
| 14. | $24,000 - 14,762$ | 14. | _____ |

Grade Four Reasoning Sample Test

ACSI Math Olympics

1. The top shelf held 27 books. The bottom shelf held 43 books.
11 books from the top shelf were checked out.
6 books from the bottom shelf are missing.
How many books are left on both shelves? 1. _____

2. Use the chart below to find the average number of pages
that Nick read each day of last week.
Monday—14 Tuesday—23 Wednesday—16 Thursday—9 Friday—18 2. _____

3. Mrs. McKenna bought admission tickets to the zoo.
She bought two adult tickets for \$7.00 each.
She bought three children's tickets for \$4.50 each.
She paid for the tickets with three \$10 bills.
How much change did Mrs. McKenna receive? 3. _____

4. The gift shop sold balloon bouquets of 7 multicolored balloons.
Audrey's mom bought 3 balloon bouquets to decorate for a class party.
How many balloons did Audrey's mom buy? 4. _____

Find the next number in each of the following:

5. 63, 65, 67, 69, _____ 5. _____

6. 44, 41, 38, 35, _____ 6. _____

7. 96, 48, 24, 12, _____ 7. _____

8. 10, 11, 13, 16, 20, _____ 8. _____

9. Find the number to replace the question mark:
0 2 4 5
5 7 9 10
7 9 11 12
8 10 ? 13 9. _____

10. Fill in the blank with the correct number.
3 → 20 _____
5 → 32 _____
8 → 50 _____
9 → _____ 10. _____

Name _____

Date _____

$$\frac{3}{5} + \frac{3}{4} =$$

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

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

$$\frac{3}{5} - \frac{7}{20} =$$

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

$$\frac{1}{2} - \frac{5}{16} =$$

$$\frac{7}{10} + \frac{1}{6} =$$

$$\frac{4}{15} - \frac{1}{6} =$$

$$\frac{1}{4} + \frac{7}{10} =$$

$$\frac{9}{10} - \frac{1}{6} =$$

$$\frac{1}{4} + \frac{2}{3} =$$

$$\frac{5}{6} - \frac{7}{18} =$$

$$\frac{7}{9} + \frac{2}{3} =$$

$$\frac{1}{2} - \frac{3}{8} =$$

$$\frac{1}{3} + \frac{7}{27} =$$

$$\frac{3}{8} - \frac{1}{12} =$$

$$\frac{3}{4} + \frac{1}{2} =$$

$$\frac{1}{3} - \frac{1}{6} =$$

$$\frac{7}{15} + \frac{3}{10} =$$

$$\frac{8}{27} - \frac{2}{9} =$$

Name _____ Date _____

$$\begin{array}{r} 5\frac{1}{2} \\ - 3\frac{5}{6} \\ \hline \end{array}$$

$$\begin{array}{r} 7\frac{5}{6} \\ - 5\frac{2}{3} \\ \hline \end{array}$$

$$\begin{array}{r} 9\frac{5}{12} \\ - 4\frac{1}{4} \\ \hline \end{array}$$

$$\begin{array}{r} 6\frac{1}{8} \\ - 4\frac{1}{4} \\ \hline \end{array}$$

$$\begin{array}{r} 9\frac{3}{5} \\ - 4\frac{1}{4} \\ \hline \end{array}$$

Name _____ Date _____

$$11 \frac{1}{4} \times 3 \frac{1}{3} =$$

$$4 \frac{4}{9} \times 1 \frac{1}{4} =$$

$$1 \frac{1}{4} \times 12 \frac{6}{7} =$$

$$7 \frac{1}{2} \times 4 \frac{1}{2} =$$

$$1 \frac{1}{15} \times 7 \frac{1}{2} =$$

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

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

$$4 \frac{2}{7} \times 1 \frac{2}{3} =$$

$$2 \frac{2}{5} \times 4 \frac{1}{11} =$$

$$1 \frac{2}{3} \times 7 \frac{1}{2} =$$

Name _____ Date _____

$$3 \frac{3}{4} \div 7 \frac{1}{2} =$$

$$7 \frac{1}{5} \div 4 \frac{2}{7} =$$

$$6 \frac{3}{7} \div 4 \frac{2}{7} =$$

$$8 \frac{2}{11} \div 7 \frac{1}{2} =$$

$$1 \frac{4}{11} \div 3 \frac{3}{11} =$$

$$1 \frac{1}{5} \div 3 \frac{1}{3} =$$

$$7 \frac{1}{2} \div 5 \frac{5}{8} =$$

$$8 \frac{2}{11} \div 1 \frac{3}{7} =$$

$$2 \frac{2}{5} \div 3 \frac{3}{5} =$$

$$3 \frac{3}{11} \div 9 \frac{9}{11} =$$

NAME _____

the average of three or more numbers

What happens when corn catches a cold?

INSTRUCTIONS: First, work out the average of each set of numbers below. Second, locate your answers in the code. Third, every time an answer occurs in the code, write the letter of that problem above it.

G = Average of 45, 28, and 23 =

S = Average of 51, 26, and 40 =

R = Average of 138, 135, 138, 132, and 122 =

I = Average of 45, 37, 18, 29, 36, and 51 =

C = Average of 36, 37, and 59 =

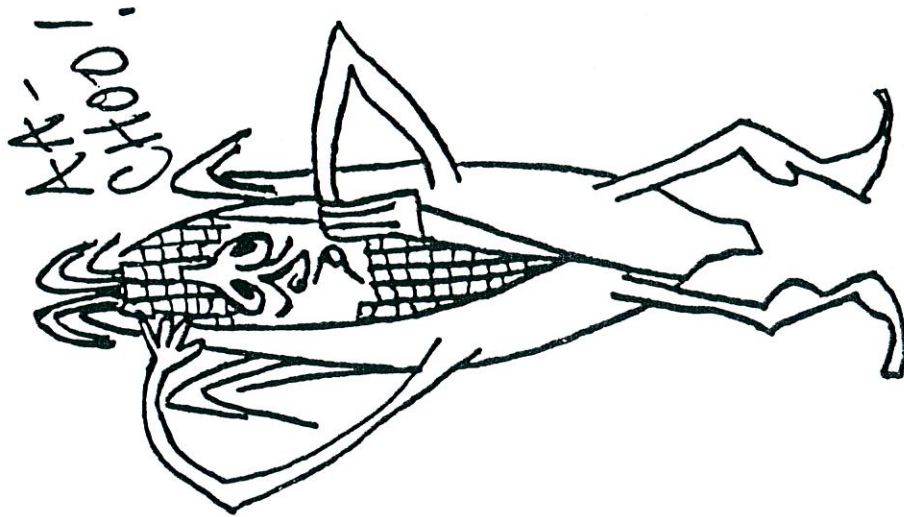
N = Average of 28, 36, 42, 53, 37, and 26 =

H = Average of 132, 136, 127, 130, and 125 =

T = Average of 10, 13, 7, 10, 13, 9, 10, and 8 =

A = Average of 7, 18, 4, 23, 92, and 12 =

E = Average of 55, 11, 78, 7, 24, and 35 =



36--10

32--35--10--39

26--37

35--26--133--26--44--130--35

NAME _____

ed whole number problem solving

What has sharp teeth, chops down cherry trees, and never tells lies?

DIRECTIONS: To find the answer to the riddle, solve each of the problems and locate your answer in the decoder. Each of the problems require only one operation to solve. Work your problems on another sheet of paper.

A soccer player ran 140 miles in 10 days as part of his preseason training. How many miles did he average each day? _____ = G

There are 168 onion plants in 7 boxes. How many plants are in each box? _____ = N

There are 150 gymnasts at a day camp. Each group has 15 gymnasts assigned to a coach. How many groups are at camp?
_____ = I

There are 84 watermelon seeds and 7 seeds are planted in each hill. How many hills are needed for the seeds? _____ = A

One dozen doughnuts cost \$1.56. What is the price of 1 doughnut? _____ = T

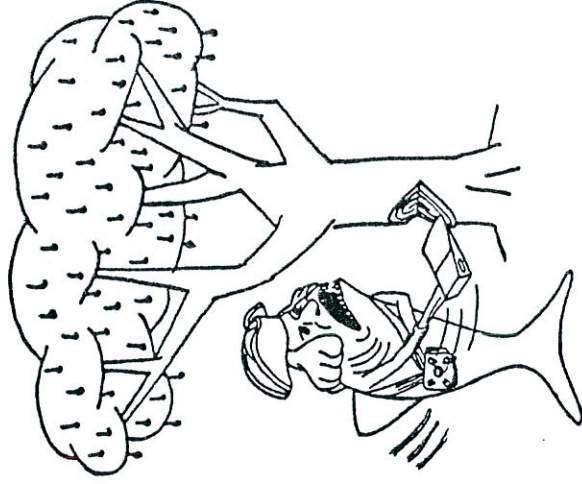
The 29 students in Mrs. Spiller's class gave \$24.65 to Greenpeace to help save the whale. What was the average contribution from each student? _____ = W

One-half dozen large pickles cost \$2.40. What is the price of one pickle? _____ = O

A window washer had 750 windows of a large office building to wash. He had 5 days to complete his job. How many windows must he average washing each day? _____ = S

How many days are in 720 hours? _____ = J

How many feet are in 540 inches? _____ = H



30--12--85--150

85--12--150--45--10--24--14--13--40--24

Name _____

Date _____



What time will it be in 3 hours and 5 minutes? _____

What time was it 2 hours and 15 minutes ago? _____

How much time will pass between now and 5:45? _____



What time will it be in 1 hour and 50 minutes? _____

What time was it 3 hours and 20 minutes ago? _____

How much time will pass between now and 11:35? _____



What time will it be in 3 hours and 15 minutes? _____

What time was it 1 hour and 5 minutes ago? _____

How much time will pass between now and 2:30? _____



What time will it be in 1 hour and 35 minutes? _____

What time was it 3 hours and 55 minutes ago? _____

How much time will pass between now and 1:45? _____

Name: _____



$$5,312 - 4,576$$

$$9,751 \times 15$$

$$5.3 + 128.45 + 27.104$$

$$624 \times 58$$

$$(5 \times 9) + (8 \times 2) + (3 \times 10)$$

$$4 \overline{)14860}$$

$$6 + (12 \times 7) + 9$$

$$9 \overline{)54992}$$

$$24,000,000 - 150,324$$

Reduce these Fractions!

$$\frac{9}{12} =$$

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

$$\frac{16}{20} =$$

$$\frac{21}{28} =$$

$$\frac{18}{144} =$$

$$\frac{72}{96} =$$

$$\frac{280}{420} =$$

$$\frac{81}{135} =$$

$$\frac{45}{120} =$$

Solve by figuring out the function.

$$4 \rightarrow 22$$

$$2 \rightarrow 7$$

$$5 \rightarrow 29$$

$$6 \rightarrow 30$$

$$9 \rightarrow 28$$

$$6 \rightarrow 34$$

$$7 \rightarrow 34$$

$$10 \rightarrow 31$$

$$8 \rightarrow 44$$

$$9 \rightarrow \text{---}$$

$$5 \rightarrow \text{---}$$

$$10 \rightarrow \text{---}$$

Complete the Pattern

$$7, 9, 13, 19, \text{---}$$

$$55, 51, 47, 43, \text{---}$$

$$176, 88, 44, 22, \text{---}$$

$$6, 12, 24, 48, \text{---}$$