

# MENTAL MATH <sup>3-4</sup>

MINI MENTAL WORKOUTS TO IMPROVE COMPUTATION SKILLS

**Written by**  
Caryn Day

**Editors:** Jennifer Dashef and Alaska Hults

**Illustrator:** Donna Catanese

**Cover Illustrator:** Donna Catanese

**Designers:** Moonhee Pak and Marek/Janci Design

**Cover Designer:** Moonhee Pak

**Art Director:** Tom Cochrane

**Project Director:** Carolea Williams

Special thanks to all the teachers and children at Noble Elementary School for contributing mental math problem ideas: Irene Budworth, Barbara Franke, Liliana Isaad, Yvonne Raphael, Sylvia White, Gayle Wolf, Alan Arjon, David Barrientos, Kevin Casteneda, Amy Chanbopha Sen, Paul Collins, Danny Garay, Anabel Gomez, Melray Green, Mario Guzman, Isabel Mendoza, Franklin Monjaras, Raul Ortiz, Andrew Perez, Kim Sandoval, Henry Segovia, and Janessa Suguitan.

# Table of Contents

<b>Introduction</b>	<b>3</b>
<b>Getting Started</b>	<b>4</b>
<b>Assessment</b>	<b>5</b>
<b>Math Concepts</b>	<b>6</b>
<b>Mental Math Extensions</b>	<b>7</b>
<b>Mental Math Problems</b>	<b>10</b>

# Introduction

Mental math involves the ability to quickly make mathematical calculations without the aid of a calculator, paper and pencil, or a computer. The problems in *Mental Math* provide daily opportunities for students to practice mental calculations as well as improve their math, listening, problem-solving, and communication skills. Students learn and store math facts and operations during each mental calculation and apply this knowledge to the solution of new problems.

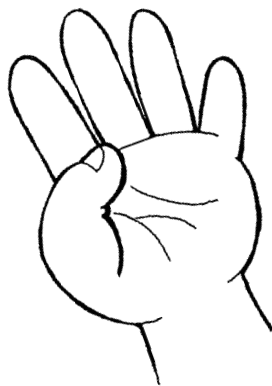
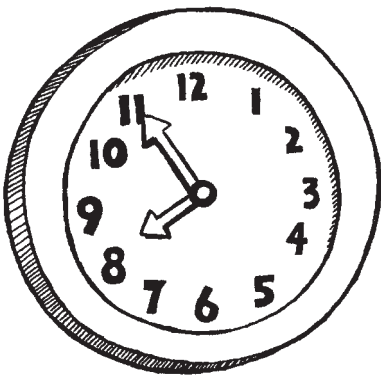
Mental math problems are a great way to start your class's day. Use them to help students focus, listen, and warm up. Need to fill a few minutes in your daily schedule? The problems in *Mental Math* also make perfect “sponge” activities. Adapt the problems to meet your unique instructional needs and make them an essential component of your daily classroom schedule.

This resource features 110 mental math problems on reproducible cards;

suggestions for using the problems for individual, small-group, and whole-group activities; assessment tips; and a reproducible record chart and game sheet. Designed to reinforce your whole-class lessons, the problems include the following content and process areas from the National Council of Teachers of Mathematics:

- number and operation
- patterns
- geometry
- data analysis
- problem solving
- reasoning and proof
- communication
- connections
- representation

Encourage students to think of the problems as having “friendly numbers”—numbers they can easily compute in their head—and you will create a learning environment where all students experience mental math success!



# Getting Started

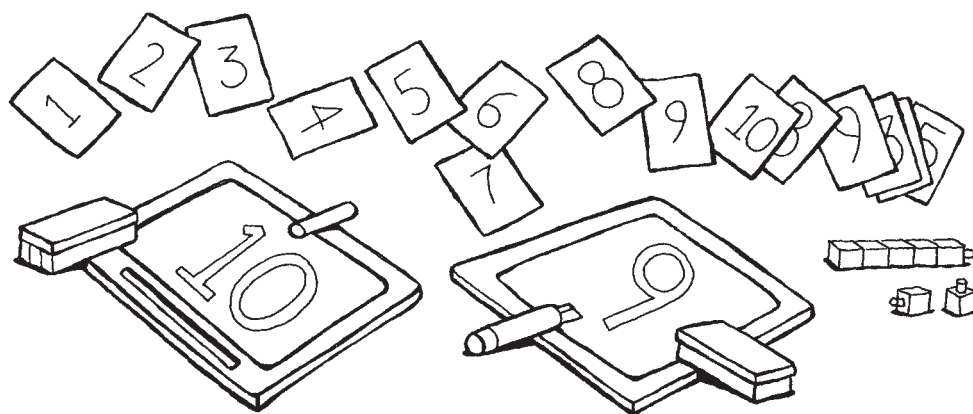
Introduce mental math problems at the beginning of the year. Use them to build on current math concepts. Start by photocopying and cutting apart the reproducible mental math cards. Read each problem in advance to make sure students are familiar with the math concept(s), skill(s), and interdisciplinary facts needed to correctly calculate the answer. Refer to page 6 for an explanation of the skills that relate to each math concept presented in this book. You may choose to present one or several mental math problems per day in the sequence that best meets the needs of your class. Modify individual problems to make them easier or more challenging, depending on the skill level of your students.

Read a mental math problem to the class. Give students ten seconds to calculate each step of the problem. (The answer for each step is listed in parentheses for quick reference.) If you find that some students are struggling

with mental calculations, ask them to show their answer for each step (rather than just their final answer).

The problems in *Mental Math* direct students to whisper their answer to their neighbor or show it on their fingers. However, feel free to modify the directions to have students answer problems by showing the appropriate number card, writing on an individual chalkboard or dry erase board, or writing in a math journal.

Review the final answer to each problem by having a volunteer explain how he or she calculated each step. Ask the rest of the class to give a thumbs-up sign if they think a calculation is correct. Write correct calculations on the chalkboard for clarification or reinforcement. Show students the most effective way to group or break down numbers for problems. Have students compare and contrast different calculations to find the quickest way to get the correct answer.



# Assessment

The best way to assess students' skill level and their comprehension of each problem is to carefully observe their reactions. Watch to see who hesitates and who quickly responds. Note students' reactions when they whisper answers to each other.

A math journal is another way to assess mental math ability. Staple several sheets of blank paper inside a construction paper cover to create a mental math journal for each student. Once a week, have students write in their journal their answers and an explanation of how they calculated each answer

(in place of having volunteers explain their calculations). Use the Record Chart (page 8) to keep track of individual progress. Review each student's journal, and write a check under the corresponding concept(s) for each problem the student answered correctly.

Use the math journals and the data from the record chart to determine if a student uses effective calculation methods. Present mini-lessons on specific math concepts to individual students or small groups.



# Math Concepts

Mental math problems incorporate a variety of math concepts. The following list provides a definition of each concept and the ways in which it appears in this book. Use the parenthetical reference to locate where each concept first appears.

**Addition:** Find the total number of items when two groups of items are combined. Students solve one- to four-digit addition problems. (#1, page 10)

**Calendar:** Demonstrate knowledge of periods of time. (#2, page 10)

**Decimals:** Solve a problem with decimals. Students add and subtract decimals. (#100, page 59)

**Division:** Find the number of times a group contains a given subgroup. Students solve double- and triple-digit division problems. (#22, page 20)

**Fractions:** Find a part of a whole. Students add and subtract fractions. (#45, page 32)

**Money:** Demonstrate knowledge of the value of coins and dollars. (#4, page 11)

**Multiplication:** Calculate the total number of items consisting of equal groups. Students double and triple numbers and solve single-, double-, and triple-digit multiplication problems. (#5, page 12)

**Number Sequence:** Identify the order or compare values of two numbers. (#5, page 12)

**Place Value:** Determine the value of a digit by its position within a number. (#5, page 12)

**Rounding Numbers:** Find the nearest whole number or given place value. (#31, page 25)

**Shapes:** Demonstrate knowledge of the properties of a named polygon. Students identify the number of sides or angles of a given geometric shape. (#1, page 10)

**Subtraction:** Compare two groups and find the difference, or find what is left when one group is taken from another. Students solve single-, double-, and triple-digit subtraction problems. (#3, page 11)

**Time:** Calculate time to the minute, quarter hour, half hour, and hour. (#7, page 13)

**Vocabulary:** Identify and use math vocabulary (e.g., mean, mode, range) to solve problems. (#59, page 39)



# Mental Math Extensions

There are so many fun ways to use *Mental Math*. The following individual, small-group, and whole-group activities feature a variety of ways to use the mental math cards.

- Give two students 14 mental math cards. Ask one student to shuffle and deal all of the cards. Have students alternate reading their cards to their partner. If their partner calculates the problem correctly, have the reader give that card to his or her partner. If their partner is incorrect, have the reader discard the card. Encourage students to try to collect more cards each time they repeat the game.



- Select a class set of mental math cards. Divide the class into two teams. Call one player from each team to the front of the class, and place a bell in front of each player. Read a mental math card. The first player to ring the bell and give the correct answer earns a point for his or her team. If the first player gives an incorrect answer, invite the other player to respond. Continue the game with two new players and a new mental math card until each student has had two turns. Applaud both teams when the last card has been played.

- Place 30 mental math cards at a learning center. Give each student at the center a Game Sheet (page 9) and pencil. Ask one student in the group to shuffle the cards and place them in a pile. Have students take turns reading a card while the remaining group members record the mental math card number in the *Card #* column and their answer in the



*Answer* column of their game sheet. Have the reader check the players' answers. Invite students to record one point in the *Points* column next to each correct answer. The student with the most points wins the game.

- Ask students to write their own mental math problems. Challenge students to write at least four steps in their problems. Review the problems for accuracy, and then share them with the class.



# Record Chart

Mental Math Problems \_\_\_\_\_ to \_\_\_\_\_

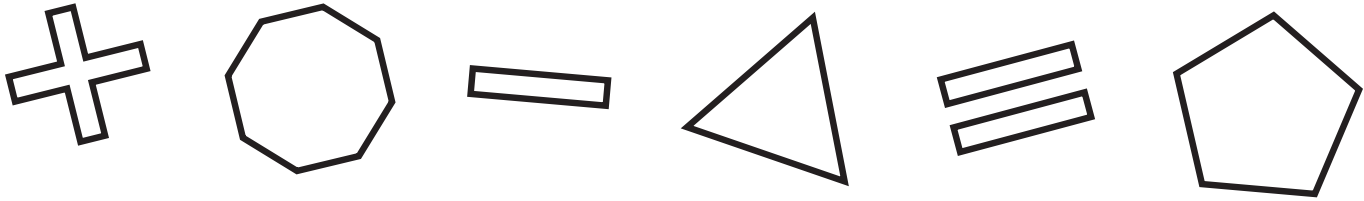


Shapes Number Sequence Calendar Addition Subtraction Time Money Place Value Rounding Numbers Multiplication Division Fractions Decimals Vocabulary Other:																					



# Game Sheet

Card #	Answer	Points



# MENTAL MATH

## 1

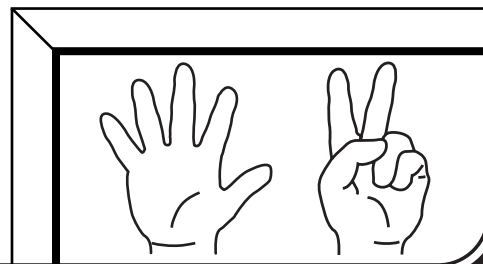
Start with the number of sides on a triangle. (3)

Add the number of sides on a square. (7)

Show me your answer with your fingers. (7)



**Math Concepts:** shapes, addition



# MENTAL MATH

## 2

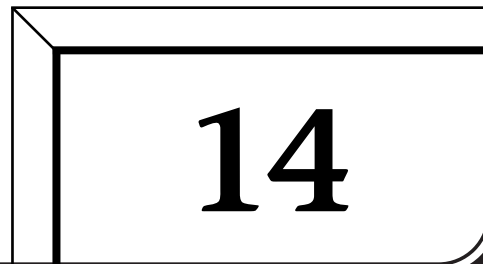
Start with the number of days in one year. (365)

Add the digits together. (14)

Whisper your answer to your neighbor. (14)



**Math Concepts:** calendar, addition



# MENTAL MATH

## 3

Start with the value of one dozen. (12)

Subtract 2. (10)

Add the digits together. (1)

Show me your answer with your fingers. (1)



**Math Concepts:** subtraction, addition



# MENTAL MATH

## 4

Start with the number of pennies in one dollar. (100)

Subtract the number of dimes in four quarters. (90)

Whisper your answer to your neighbor. (90)



**Math Concepts:** money, subtraction

# 90

# MENTAL MATH

## 5

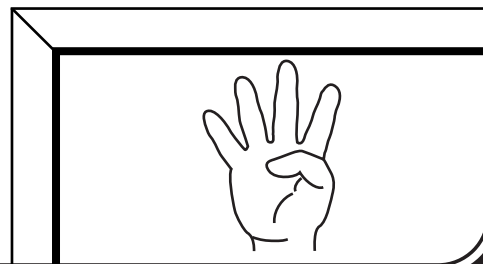
Start with the number that comes after 23. (24)

Double that number. (48)

Show me the digit in the tens place with your fingers. (4)



**Math Concepts:** number sequence, multiplication, place value



# MENTAL MATH

## 6

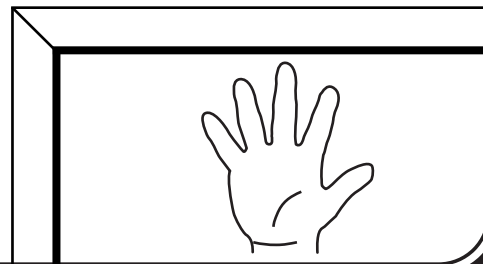
Start with the number of days in October. (31)

Subtract 6. (25)

Show me the digit in the ones place with your fingers. (5)



**Math Concepts:** calendar, subtraction, place value



# MENTAL MATH

## 7

Start with the time 9:00. (9:00)

Add one minute. (9:01)

Whisper the time to your neighbor. (9:01)



**Math Concepts:** time, addition

9:01

# MENTAL MATH

## 8

Start with the number of dimes in one dollar and 20 cents. (12)

Double that number. (24)

Whisper your answer to your neighbor. (24)



**Math Concepts:** money, multiplication

24

# MENTAL MATH

## 9

Start with the value of one dime. (10¢)

Add the value of one quarter. (35¢)

Subtract the value of one nickel. (30¢)

Whisper your answer to your neighbor. (30¢)



**Math Concepts:** money, addition, subtraction

30¢

# MENTAL MATH

## 10

Start with the number of moons Earth has. (1)

Triple that number. (3)

Show me your answer with your fingers. (3)



**Math Concept:** multiplication



# MENTAL MATH

## 11

Start with the value of one half-dollar. (50¢)

Add the value of one quarter. (75¢)

Add the value of one dime. (85¢)

Whisper your answer to your neighbor. (85¢)



**Math Concepts:** money, addition

85¢

# MENTAL MATH

## 12

Start with the time 12:00. (12:00)

Add 60 minutes. (1:00)

Whisper the time to your neighbor. (1:00)



**Math Concepts:** time, addition

1:00

# MENTAL MATH

## 13

Start with the value of one quarter. (25¢)

Double that value. (50¢)

Whisper your answer to your neighbor. (50¢)



**Math Concepts:** money, multiplication

50¢

# MENTAL MATH

## 14

Start with the time 1:00. (1:00)

Add 30 minutes. (1:30)

Whisper the time to your neighbor. (1:30)



**Math Concepts:** time, addition

1:30



# MENTAL MATH

## 15

Start with the number of eyes you have. (2)

Double that number. (4)

Triple that number. (12)

Whisper your answer to your neighbor. (12)



**Math Concept:** multiplication

12

# MENTAL MATH

## 16

Start with the number of toes you have. (10)

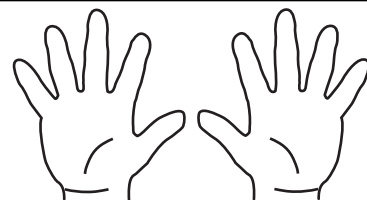
Add the number of hands you have. (12)

Subtract the number of eyes you have. (10)

Show me your answer with your fingers. (10)



**Math Concepts:** addition, subtraction



# MENTAL MATH

## 17

Start with the value of one quarter. (25¢)

Add the value of two dimes. (45¢)

Whisper your answer to your neighbor. (45¢)



**Math Concepts:** money, addition

45¢

# MENTAL MATH

## 18

Start with the number of days in one week. (7)

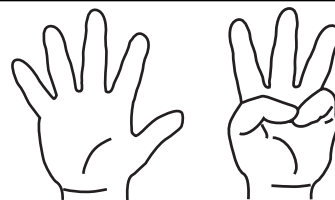
Add the number of angles in a triangle. (10)

Subtract 2. (8)

Show me your answer with your fingers. (8)



**Math Concepts:** calendar, addition, shapes, subtraction



# MENTAL MATH

## 19

Start with the number 7. (7)

Double that number. (14)

Subtract 3. (11)

Whisper your answer to your neighbor. (11)



**Math Concepts:** multiplication, subtraction

11

# MENTAL MATH

## 20

Start with the time 2:48. (2:48)

Subtract two minutes. (2:46)

Whisper the time to your neighbor. (2:46)



**Math Concepts:** time, subtraction

2:46

# MENTAL MATH

## 21

Start with the number of eyes you have. (2)

Multiply that number by the number of pennies in two dimes. (40)

Show me the digit in the tens place with your fingers. (4)



**Math Concepts:** multiplication, money, place value



# MENTAL MATH

## 22

Start with the value of two quarters. (50¢)

Divide that value by 2. (25¢)

Whisper your answer to your neighbor. (25¢)



**Math Concepts:** money, division

# 25¢

# MENTAL MATH

## 23

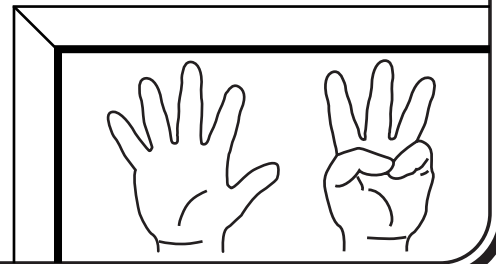
Start with the number of feet you have. (2)

Multiply that number by the number of sides on a square. (8)

Show me your answer with your fingers. (8)



**Math Concepts:** multiplication, shapes



# MENTAL MATH

## 24

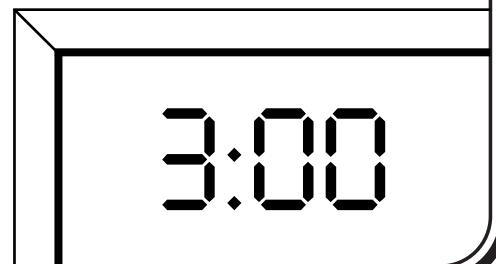
Start with the time 3:15. (3:15)

Subtract 15 minutes. (3:00)

Whisper the time to your neighbor. (3:00)



**Math Concepts:** time, subtraction



# MENTAL MATH

## 25

Start with the number of sides on a rectangle. (4)

Add the number of pennies in one dime. (14)

Multiply that number by 2. (28)

Whisper your answer to your neighbor. (28)



**Math Concepts:** shapes, addition, money, multiplication

28

# MENTAL MATH

## 26

Start with the number of shells on seven snails. (7)

Multiply that number by the number of pennies in one nickel. (35)

Add the digits together. (8)

Show me your answer with your fingers. (8)



**Math Concepts:** multiplication, money, addition



# MENTAL MATH

## 27

Start with the number of months in one year. (12)

Multiply that number by the number of eyes and tails on a cat. (36)

Whisper your answer to your neighbor. (36)



**Math Concepts:** calendar, multiplication

# 36

# MENTAL MATH

## 28

Start with the number of sides on a diamond. (4)

Multiply that number by the number of legs on a cougar. (16)

Double that number. (32)

Whisper your answer to your neighbor. (32)



**Math Concepts:** shapes, multiplication

# 32

# MENTAL MATH

## 29

Start with the number that comes after 5. (6)

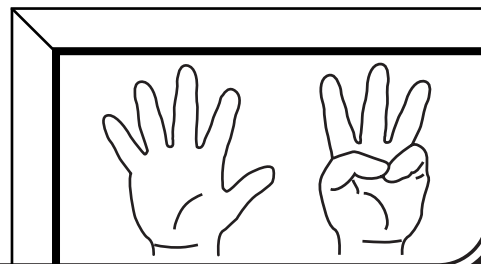
Multiply that number by the number of legs on a chair. (24)

Divide that number by 3. (8)

Show me your answer with your fingers. (8)



**Math Concepts:** number sequence, multiplication, division



# MENTAL MATH

## 30

Start with the greatest number on the clock. (12)

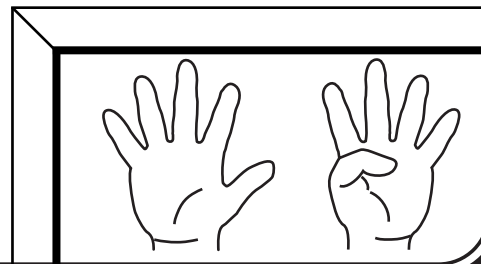
Triple that number. (36)

Divide that number by 4. (9)

Show me your answer with your fingers. (9)



**Math Concepts:** number sequence, multiplication, division





# MENTAL MATH

## 31

Start with the number of hours in one day. (24)

Double that number. (48)

Round that number to the nearest ten. (50)

Whisper your answer to your neighbor. (50)



**Math Concepts:** time, multiplication, rounding numbers

50

# MENTAL MATH

## 32

Start with the number of letters in the word *art*. (3)

Multiply that number by the number of nickels in one quarter. (15)

Double that number. (30)

Whisper your answer to your neighbor. (30)



**Math Concepts:** multiplication, money

30

# MENTAL MATH

## 33

Start with the number of planets in our solar system. (9)

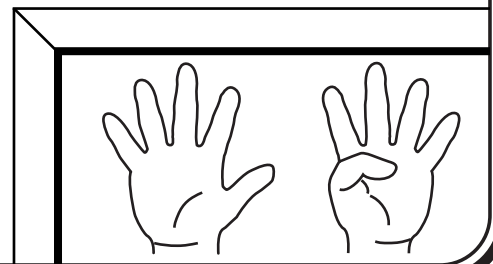
Triple that number. (27)

Add the digits together. (9)

Show me your answer with your fingers. (9)



**Math Concepts:** multiplication, addition



Mental Math • 3-4 © 2001 Creative Teaching Press

# MENTAL MATH

## 34

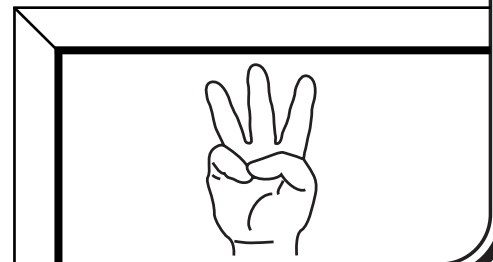
Start with the number of tails on five kangaroos. (5)

Find that number on the clock and count back two hours. (3)

Show me the hour with your fingers. (3)



**Math Concepts:** time, subtraction



Mental Math • 3-4 © 2001 Creative Teaching Press

# MENTAL MATH

## 35

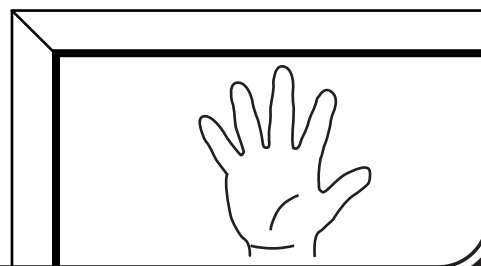
Start with the number of wheels on a car. (4)

Add the number of stars on the United States flag. (54)

Show me the digit in the tens place with your fingers. (5)



**Math Concepts:** addition, place value



# MENTAL MATH

## 36

Start with the number of days in June. (30)

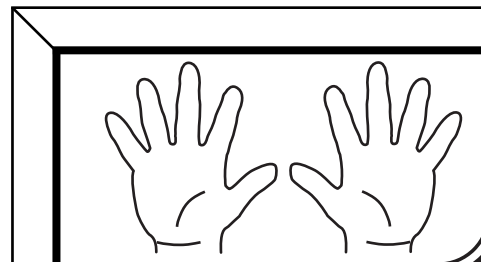
Add the number of fingers you have. (40)

Divide that number by the number of ears on two elephants. (10)

Show me your answer with your fingers. (10)



**Math Concepts:** calendar, addition, division



# MENTAL MATH

## 37

Start with the number of pennies in one quarter. (25)

Multiply that number by the number of legs on a chair. (100)

Triple that number. (300)

Whisper your answer to your neighbor. (300)



**Math Concepts:** money, multiplication

# 300

Mental Math • 3-4 © 2001 Creative Teaching Press

# MENTAL MATH

## 38

Start with the number 12. (12)

Double that number. (24)

Divide that number by 6. (4)

Show me your answer with your fingers. (4)



**Math Concepts:** multiplication, division



Mental Math • 3-4 © 2001 Creative Teaching Press

# MENTAL MATH

## 39

Start with the number of engines in three cars. (3)

Add 12. (15)

Divide that number by the number of wheels on a tricycle. (5)

Show me your answer with your fingers. (5)



**Math Concepts:** addition, division



# MENTAL MATH

## 40

Start with the greatest number on the clock. (12)

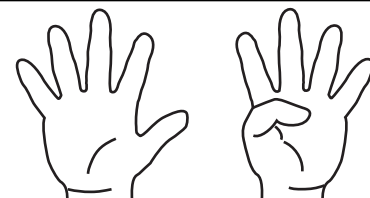
Divide that number by the number of legs on a chair. (3)

Triple that number. (9)

Show me your answer with your fingers. (9)



**Math Concepts:** number sequence, division, multiplication



# MENTAL MATH

## 41

Start with the number of days in September. (30)

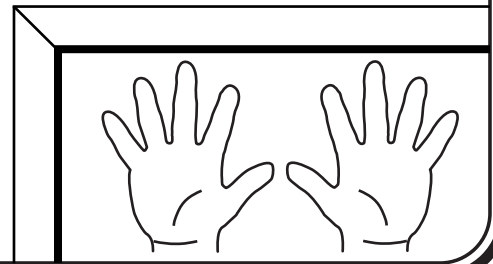
Divide that number by 6. (5)

Add the number of fingers you have on one hand. (10)

Show me your answer with your fingers. (10)



**Math Concepts:** calendar, division, addition



# MENTAL MATH

## 42

Start with the number of dimes in one dollar. (10)

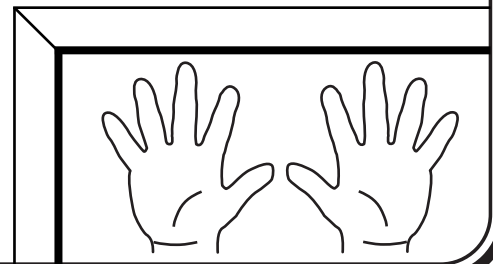
Subtract the number of sides on a pentagon. (5)

Add the number of pennies in one nickel. (10)

Show me your answer with your fingers. (10)



**Math Concepts:** money, subtraction, shapes, addition



# MENTAL MATH

## 43

Start with the number of sides on a rectangle. (4)

Double that number. (8)

Triple that number. (24)

Whisper your answer to your neighbor. (24)



**Math Concepts:** shapes, multiplication

24

# MENTAL MATH

## 44

Start with the number of letters in the word *recess*. (6)

Add the number of nickels in five dimes. (16)

Whisper your answer to your neighbor. (16)



**Math Concepts:** addition, money

16

# MENTAL MATH

## 45

Start with the number of stars on the United States flag. (50)

Subtract the number of pennies in one dime. (40)

Subtract half of that number. (20)

Whisper your answer to your neighbor. (20)



**Math Concepts:** subtraction, money, fractions

20

# MENTAL MATH

## 46

Start with the number of wheels on a tricycle. (3)

Triple that number. (9)

Add the number of engines in three cars. (12)

Whisper your answer to your neighbor. (12)



**Math Concepts:** multiplication, addition

12



# MENTAL MATH

## 47

Start with the number of letters in the word *English*. (7)

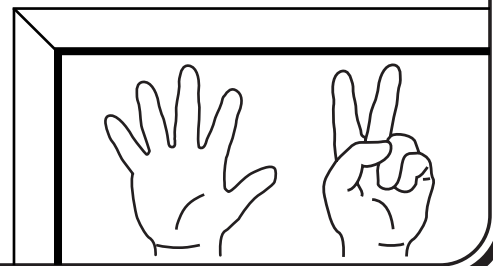
Multiply that number by the number of years in one century. (700)

Add the digits together. (7)

Show me your answer with your fingers. (7)



**Math Concepts:** multiplication, calendar, addition



# MENTAL MATH

## 48

Start with the number of sides on a heptagon. (7)

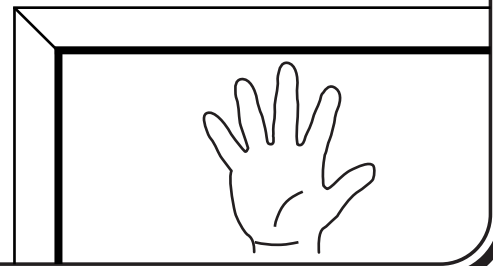
Double that number. (14)

Add the digits together. (5)

Show me your answer with your fingers. (5)



**Math Concepts:** shapes, multiplication, addition



# MENTAL MATH

## 49

Start with the number of dimes in 80 cents. (8)

Multiply that number by 9. (72)

Whisper your answer to your neighbor. (72)



**Math Concepts:** money, multiplication

72

# MENTAL MATH

## 50

Start with the value of one dozen. (12)

Multiply that number by the number of toes you have. (120)

Subtract the number of hands you have. (118)

Whisper your answer to your neighbor. (118)



**Math Concepts:** multiplication, subtraction

118

# MENTAL MATH

## 51

Start with the number of days in November. (30)

Double that number. (60)

Triple that number. (180)

Whisper your answer to your neighbor. (180)



**Math Concepts:** calendar, multiplication

# 180

# MENTAL MATH

## 52

Start with the number of dimes in 50 cents. (5)

Double that number. (10)

Subtract half of that number. (5)

Show me your answer with your fingers. (5)



**Math Concepts:** money, multiplication, subtraction, fractions



# MENTAL MATH

## 53

Start with the number of years in two centuries. (200)

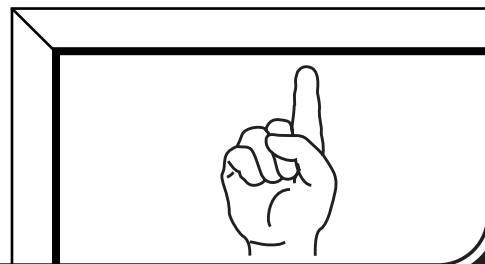
Divide that number by 2. (100)

Add the digits together. (1)

Show me your answer with your fingers. (1)



**Math Concepts:** calendar, division, addition



# MENTAL MATH

## 54

Start with the number of legs on a dog. (4)

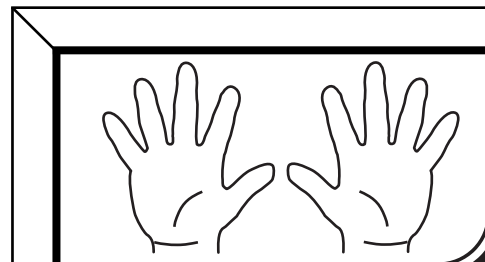
Add the number of letters in the word *student*. (11)

Round that number to the nearest ten. (10)

Show me your answer with your fingers. (10)



**Math Concepts:** addition, rounding numbers



# MENTAL MATH

## 55

Start with the number 29. (29)

Round that number to the nearest ten. (30)

Subtract half of that number. (15)

Add the number of dimes in one dollar. (25)

Whisper your answer to your neighbor. (25)



**Math Concepts:** rounding numbers, subtraction, fractions, addition, money

25

# MENTAL MATH

## 56

Start with the number of white stripes on the United States flag. (6)

Multiply that number by the number of wheels on a car. (24)

Round that number to the nearest ten. (20)

Whisper your answer to your neighbor. (20)



**Math Concepts:** multiplication, rounding numbers

20

# MENTAL MATH

## 57

Start with the number 12. (12)

Double that number. (24)

Round that number to the nearest ten. (20)

Whisper your answer to your neighbor. (20)



**Math Concepts:** multiplication, rounding numbers

20

# MENTAL MATH

## 58

Start with the number of moons Earth has. (1)

Multiply that number by the number of hours in one day. (24)

Divide that number by 12. (2)

Show me your answer with your fingers. (2)



**Math Concepts:** multiplication, time, division



# MENTAL MATH

## 59

Start with the range of 5, 8, and 15. (10)

Multiply that number by the number of toes you have on one foot. (50)

Show me the digit in the tens place with your fingers. (5)



**Math Concepts:** vocabulary, multiplication, place value



# MENTAL MATH

## 60

Start with the number of nickels in one dollar. (20)

Subtract the number of nickels in one quarter. (15)

Add the number of dimes in five dollars. (65)

Whisper your answer to your neighbor. (65)



**Math Concepts:** money, subtraction, addition

# 65

# MENTAL MATH

## 61

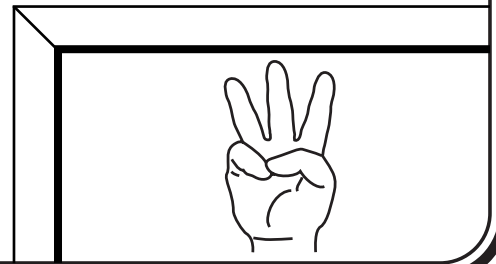
Start with the number 24. (24)

Add the mode of 5, 10, 10, and 2. (34)

Show me the digit in the tens place with your fingers. (3)



**Math Concepts:** addition, vocabulary, place value



# MENTAL MATH

## 62

Start with the number of months in one year. (12)

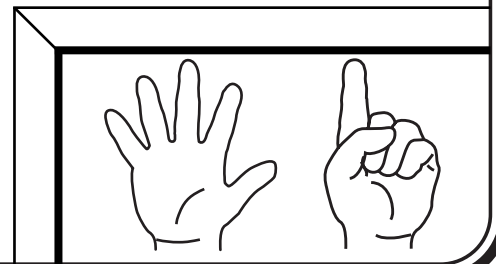
Double that number. (24)

Add the digits together. (6)

Show me your answer with your fingers. (6)



**Math Concepts:** calendar, multiplication, addition





# MENTAL MATH

## 63

Start with the number of days in one week. (7)

Triple that number. (21)

Round that number to the nearest ten. (20)

Whisper your answer to your neighbor. (20)



**Math Concepts:** calendar, multiplication, rounding numbers

20

# MENTAL MATH

## 64

Start with the number of legs on three porcupines. (12)

Add the number of quarters in one dollar. (16)

Divide that number by 4. (4)

Show me your answer with your fingers. (4)



**Math Concepts:** addition, money, division



# MENTAL MATH

## 65

Start with the number of days in April. (30)

Add the mean of 1, 2, and 3. (32)

Subtract the number of pennies in one dime. (22)

Whisper your answer to your neighbor. (22)



**Math Concepts:** calendar, addition, vocabulary, subtraction, money

22

# MENTAL MATH

## 66

Start with the value of one dozen. (12)

Add the number of sides on four triangles. (24)

Divide that number by the number of letters in the word *art*. (8)

Show me your answer with your fingers. (8)



**Math Concepts:** addition, shapes, division



# MENTAL MATH

## 67

Start with the number of minutes in one hour. (60)

Divide that number by 2. (30)

Subtract the number of days in one week. (23)

Whisper your answer to your neighbor (23)



**Math Concepts:** time, division, subtraction, calendar

23

# MENTAL MATH

## 68

Start with the number 19. (19)

Round that number to the nearest ten. (20)

Subtract half of that number. (10)

Divide that number by 2. (5)

Show me your answer with your fingers. (5)



**Math Concepts:** rounding numbers, subtraction, fractions, division



# MENTAL MATH

## 69

Start with the number between 20 and 22. (21)

Add the range of 1, 3, and 6. (26)

Subtract the number of legs on a chair. (22)

Whisper your answer to your neighbor. (22)



**Math Concepts:** number sequence, addition, vocabulary, subtraction

# 22

# MENTAL MATH

## 70

Start with the number of pennies in one dollar. (100)

Add 1. (101)

Double that number. (202)

Whisper your answer to your neighbor. (202)



**Math Concepts:** money, addition, multiplication

# 202

# MENTAL MATH

## 71

Start with the number of fingers you have. (10)

Divide that number by the number of eyes you have. (5)

Multiply that number by the number that comes before 8. (35)

Whisper your answer to your neighbor. (35)



**Math Concepts:** division, multiplication, number sequence

35

# MENTAL MATH

## 72

Start with the number of eyes on an eagle. (2)

Multiply that number by the number of fingers you have on one hand. (10)

Double that number. (20)

Whisper your answer to your neighbor. (20)



**Math Concept:** multiplication

20

# MENTAL MATH

## 73

Start with the time 2:00. (2:00)

Subtract one hour. (1:00)

Whisper the time to your neighbor. (1:00)



**Math Concepts:** time, subtraction

1:00

# MENTAL MATH

## 74

Start with the number of letters in the word *history*. (7)

Double that number. (14)

Add the number of pennies in one nickel. (19)

Whisper your answer to your neighbor. (19)



**Math Concepts:** multiplication, addition, money

19

# MENTAL MATH

## 75

Start with the time 2:35. (2:35)

Subtract one hour and 20 minutes. (1:15)

Whisper the time to your neighbor. (1:15)



**Math Concepts:** time, subtraction

1:15

# MENTAL MATH

## 76

Start with the number of seconds in one minute. (60)

Subtract half of that number. (30)

Divide that number by 6. (5)

Show me your answer with your fingers. (5)



**Math Concepts:** time, subtraction, fractions, division



# MENTAL MATH

## 77

Start with the time 6:00. (6:00)

Subtract 45 minutes. (5:15)

Whisper the time to your neighbor. (5:15)



**Math Concepts:** time, subtraction

5:15

# MENTAL MATH

## 78

Start with four hundreds. (400)

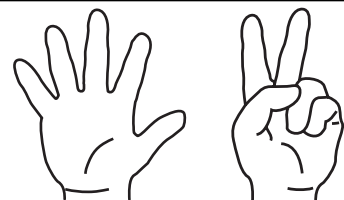
Add three tens. (430)

Add the digits together. (7)

Show me your answer with your fingers. (7)



**Math Concepts:** place value, addition





# MENTAL MATH

## 79

Start with the number of planets in our solar system. (9)

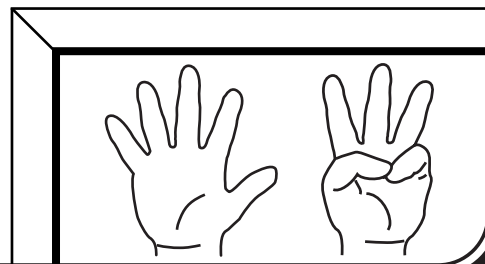
Add the number of letters in the word *Mercury*. (16)

Divide that number by the mean of 1, 2, and 3. (8)

Show me your answer with your fingers. (8)



**Math Concepts:** addition, division, vocabulary



# MENTAL MATH

## 80

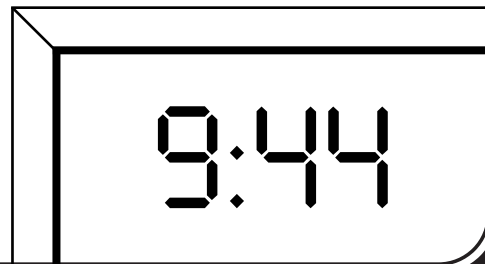
Start with the time 9:22. (9:22)

Add 22 minutes. (9:44)

Whisper the time to your neighbor. (9:44)



**Math Concepts:** time, addition



# MENTAL MATH

## 81

Start with the number of wheels on two cars. (8)

Add the range of 4, 4, and 6. (10)

Multiply that number by the number of dimes in one dollar. (100)

Whisper your answer to your neighbor. (100)



**Math Concepts:** addition, vocabulary, multiplication, money

# 100

# MENTAL MATH

## 82

Start with the number of stripes on the United States flag. (13)

Double that number. (26)

Add the number of wheels on a car. (30)

Whisper your answer to your neighbor. (30)



**Math Concepts:** multiplication, addition

# 30

# MENTAL MATH

## 83

Start with the time 4:10. (4:10)

Subtract 30 minutes. (3:40)

Whisper the time to your neighbor. (3:40)



**Math Concepts:** time, subtraction

3:40

# MENTAL MATH

## 84

Start with the value of two dollars. (\$2.00)

Add the value of four dollars. (\$6.00)

Subtract the value of two dollars and 50 cents. (\$3.50)

Whisper your answer to your neighbor. (\$3.50)



**Math Concepts:** money, addition, subtraction

\$3.50

# MENTAL MATH

## 85

Start with the mode of 6, 10, 12, and 12. (12)

Double that number. (24)

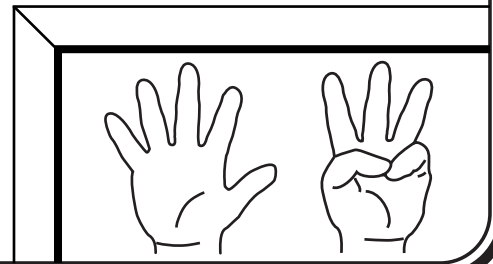
Add the digits together. (6)

Add 2. (8)

Show me your answer with your fingers. (8)



**Math Concepts:** vocabulary, multiplication, addition



# MENTAL MATH

## 86

Start with the number of pennies in three quarters and two dimes. (95)

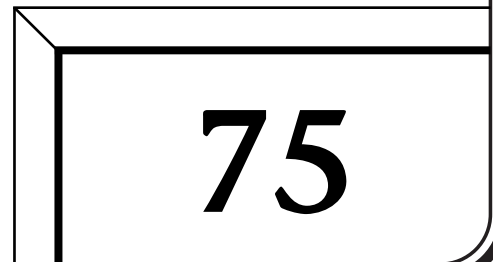
Round that number to the nearest hundred. (100)

Subtract one fourth of that number. (75)

Whisper your answer to your neighbor. (75)



**Math Concepts:** money, rounding numbers, subtraction, fractions



# MENTAL MATH

## 87

Start with the number of sides on two hexagons. (12)

Double that number. (24)

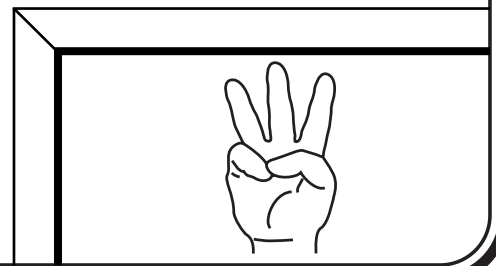
Divide that number by the number of seasons in one year. (6)

Subtract half of that number. (3)

Show me your answer with your fingers. (3)



**Math Concepts:** shapes, multiplication, division, calendar, subtraction, fractions



# MENTAL MATH

## 88

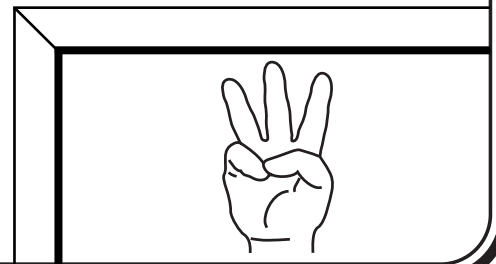
Start with the number of forms matter has. (3)

Multiply that number by the number of years in one century. (300)

Show me the digit in the hundreds place with your fingers. (3)



**Math Concepts:** multiplication, calendar, place value



# MENTAL MATH

## 89

Start with the number of letters in the word *heart*. (5)

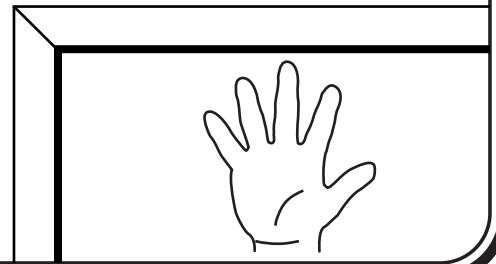
Multiply that number by the number of faces on a triangular pyramid. (20)

Divide that number by 4. (5)

Show me your answer with your fingers. (5)



**Math Concepts:** multiplication, shapes, division



# MENTAL MATH

## 90

Start with the value of one quarter and one nickel. (30¢)

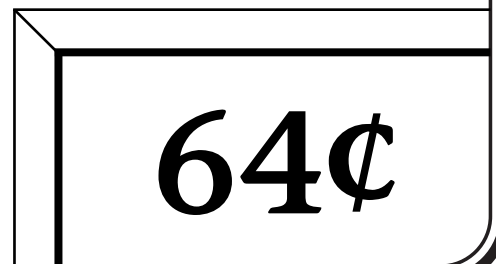
Add the value of two pennies. (32¢)

Double that value. (64¢)

Whisper your answer to your neighbor. (64¢)



**Math Concepts:** money, addition, multiplication



# MENTAL MATH

## 91

Start with the value of one dollar and 50 cents. (\$1.50)

Subtract half the value of one dollar. (\$1.00)

Whisper your answer to your neighbor. (\$1.00)



**Math Concepts:** money, subtraction, fractions

\$1.00

# MENTAL MATH

## 92

Start with the number of pennies in one dollar. (100)

Multiply that number by 3. (300)

Divide that number by the number of sides on a triangle. (100)

Show me the digit in the hundreds place with your fingers. (1)



**Math Concepts:** money, multiplication, division, shapes, place value



# MENTAL MATH

## 93

Start with the number of letters in the word *mathematics*. (11)

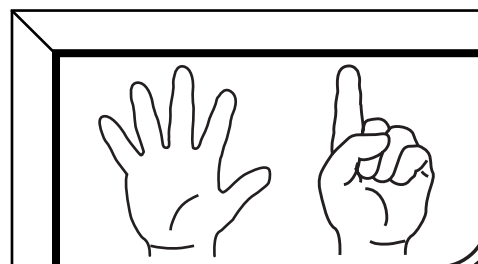
Add the digits together. (2)

Triple that number. (6)

Show me your answer with your fingers. (6)



**Math Concepts:** addition, multiplication



# MENTAL MATH

## 94

Start with the number 4. (4)

Multiply that number by the number of sides on an octagon. (32)

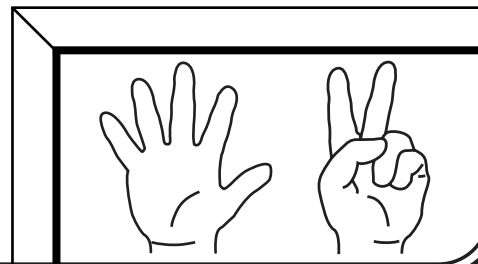
Add the number of years in two millennia. (2,032)

Add the digits together. (7)

Show me your answer with your fingers. (7)



**Math Concepts:** multiplication, shapes, addition, calendar





# MENTAL MATH

## 95

Start with the number of colors on the United States flag. (3)

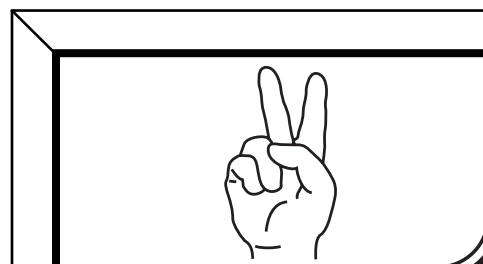
Multiply that number by the factor of 12: 8 or 4. (12)

Divide that number by 6. (2)

Show me your answer with your fingers. (2)



**Math Concepts:** multiplication, vocabulary, division



# MENTAL MATH

## 96

Start with the number of legs on two chairs. (8)

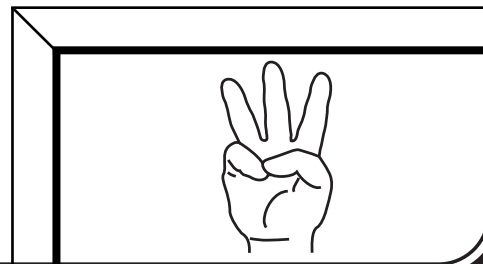
Round that number to the nearest ten. (10)

Triple that number. (30)

Show me the digit in the tens place with your fingers. (3)



**Math Concepts:** rounding numbers, multiplication, place value



# MENTAL MATH

## 97

Start with the number that comes after 5. (6)

Double that number. (12)

Multiply that number by 3. (36)

Whisper your answer to your neighbor. (36)



**Math Concepts:** number sequence, multiplication

36

# MENTAL MATH

## 98

Start with the number of pennies in one half-dollar. (50)

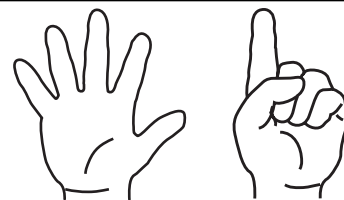
Triple that number. (150)

Add the digits together. (6)

Show me your answer with your fingers. (6)



**Math Concepts:** money, multiplication, addition



# MENTAL MATH

## 99

Start with the number of years in two centuries. (200)

Divide that number by 4. (50)

Show me the digit in the tens place with your fingers. (5)



**Math Concepts:** calendar, division, place value



# MENTAL MATH

## 100

Start with the multiple of 5: 24 or 25. (25)

Add 0.5 to that number. (25.5)

Round that number to the nearest ten. (30)

Whisper your answer to your neighbor. (30)



**Math Concepts:** vocabulary, addition, decimals, rounding numbers

## 30

# MENTAL MATH

## 101

Start with the number of letters in the word *principal*. (9)

Add 0.75 to that number. (9.75)

Round that number to the nearest ten. (10)

Double that number. (20)

Whisper your answer to your neighbor. (20)



**Math Concepts:** addition, decimals, rounding numbers, multiplication

20

# MENTAL MATH

## 102

Start with the number between 22 and 24. (23)

Add 8. (31)

Add the digits together. (4)

Add  $\frac{3}{4}$ . ( $4\frac{3}{4}$ )

Whisper your answer to your neighbor. ( $4\frac{3}{4}$ )



**Math Concepts:** number sequence, addition, fractions

$4\frac{3}{4}$

# MENTAL MATH

## 103

Start with the number of faces on a cube. (6)

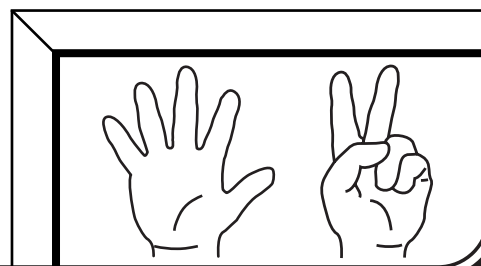
Add one eighth. ( $6\frac{1}{8}$ )

Round that number to the next largest whole number. (7)

Show me your answer with your fingers. (7)



**Math Concepts:** shapes, addition, fractions, rounding numbers



# MENTAL MATH

## 104

Start with the multiple of 10: 2 or 10. (10)

Add 0.25 to that number. (10.25)

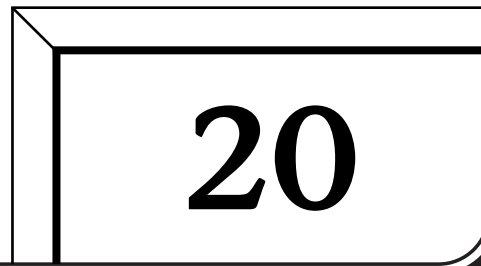
Add 10. (20.25)

Round that number to the nearest ten. (20)

Whisper your answer to your neighbor. (20)



**Math Concepts:** vocabulary, addition, decimals, rounding numbers



# MENTAL MATH

## 105

Start with the number of legs on two cows. (8)

Double that number. (16)

Add 0.45 to that number. (16.45)

Round that number to the nearest ten. (20)

Whisper your answer to your neighbor. (20)



**Math Concepts:** multiplication, addition, decimals, rounding numbers

20

# MENTAL MATH

## 106

Start with the factor of 8: 4 or 16. (4)

Add 2. (6)

Subtract  $\frac{1}{4}$ . ( $5\frac{3}{4}$ )

Whisper your answer to your neighbor. ( $5\frac{3}{4}$ )



**Math Concepts:** vocabulary, addition, subtraction, fractions

$5\frac{3}{4}$

# MENTAL MATH

## 107

Start with the number of red stripes on the United States flag. (7)

Add 2. (9)

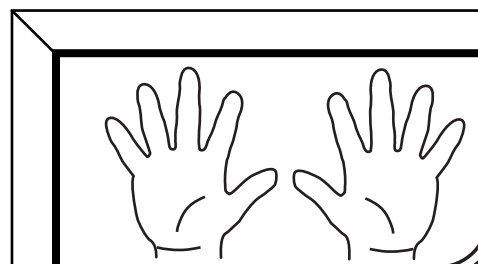
Subtract 0.5 from that number. (8.5)

Round that number to the nearest ten. (10)

Show me your answer with your fingers. (10)



**Math Concepts:** addition, subtraction, decimals, rounding numbers



# MENTAL MATH

## 108

Start with the number 32. (32)

Round that number to the nearest ten. (30)

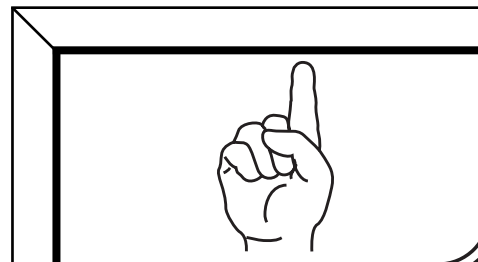
Divide that number by 10. (3)

Divide that number by 3. (1)

Show me your answer with your fingers. (1)



**Math Concepts:** rounding numbers, division



# MENTAL MATH

## 109

Start with the number of dimes in three dollars and 20 cents. (32)

Add the digits together. (5)

Subtract 0.3 from that number. (4.7)

Whisper your answer to your neighbor. (4.7)



**Math Concepts:** money, addition, subtraction, decimals

4.7

# MENTAL MATH

## 110

Start with the number of nickels in 80 cents. (16)

Divide that number by 2. (8)

Round that number to the nearest ten. (10)

Show me your answer with your fingers. (10)



**Math Concepts:** money, division, rounding numbers

