

MATHEMATICS – 4th Grade

Activities and Assessments

Standard 1: Uses a variety of strategies in the problem-solving process.

After teaching Problem Solving, give the following assessment to test the student's knowledge on "Choosing an Operation."

MATHEMATICS – 4th Grade
Activities and Assessments

Standard 2: Understands and applies basic and advanced properties.

After teaching Place Value up to 1,000,000, give the following assessment to test the student's knowledge of Place Value.

Place Value

Assessment:

Millions	Hundred-thousands	Ten-thousands	Thousands	Hundreds	Tens	Ones	Decimal .
+1	+1	+1	+1	+1	+1	+1	+1

Student receives one point for each term in the correct place. Spelling does not count. One point for decimal in the correct place.

$$+ \quad /8 \quad \underline{\hspace{1cm}}\%$$

Problem Solving

Choosing an Operation – Standard #1

Answer Key:

1. $24 - 18 = 6$ hours
2. $7 + 7 = 14$ hours
3. $12 - 5 = 7$ (chinchilla) rabbits
4. $21 - 11 = 10$ more hours
5. $121 + 71 = 50$ more hours = 192 hours
6. $19 + 13 = 32$ hours
7. $13 + 7 = 20$ birds
8. $6 + 6 = 12$ hours or $6 \times 2 = 12$ hours

Students must have the number sentence = 1 point each

Students must have the correct answer = 1 point each

Students must have the correct label = 1 point each

Total = 24 points

MATHEMATICS – 4th Grade

Activities and Assessments

Standard 3: Uses basic and advanced procedures while performing the process of computation.

1. Teaching concepts of multiplying basic facts up to 3-digits x 2-digits.
2. Photocopy enough assessment sheets (1 for each student).
3. Pass out assessment.

Name: _____

Multiplying 3-digit x 2-digit numbers

1.)
$$\begin{array}{r} 987 \\ \times 13 \\ \hline \end{array}$$

2.)
$$\begin{array}{r} 349 \\ \times 10 \\ \hline \end{array}$$

3.)
$$\begin{array}{r} 685 \\ \times 27 \\ \hline \end{array}$$

4.)
$$\begin{array}{r} 217 \\ \times 33 \\ \hline \end{array}$$

5.)
$$\begin{array}{r} 678 \\ \times 45 \\ \hline \end{array}$$

6.)
$$\begin{array}{r} 444 \\ \times 13 \\ \hline \end{array}$$

7.)
$$\begin{array}{r} 345 \\ \times 26 \\ \hline \end{array}$$

8.)
$$\begin{array}{r} 706 \\ \times 14 \\ \hline \end{array}$$

9.)
$$\begin{array}{r} 369 \\ \times 53 \\ \hline \end{array}$$

10.)
$$\begin{array}{r} 524 \\ \times 73 \\ \hline \end{array}$$

Assessment and Answer Key

Multiplying 3-digit x 2-digit numbers

$$\begin{array}{r} 1.) \quad 987 \\ \quad \times 13 \\ \hline 12,831 \end{array}$$

$$\begin{array}{r} 2.) \quad 349 \\ \quad \times 10 \\ \hline 3,490 \end{array}$$

$$\begin{array}{r} 3.) \quad 685 \\ \quad \times 27 \\ \hline 18,495 \end{array}$$

$$\begin{array}{r} 4.) \quad 217 \\ \quad \times 33 \\ \hline 7,161 \end{array}$$

$$\begin{array}{r} 5.) \quad 678 \\ \quad \times 45 \\ \hline 30,510 \end{array}$$

$$\begin{array}{r} 6.) \quad 444 \\ \quad \times 13 \\ \hline 5,772 \end{array}$$

$$\begin{array}{r} 7.) \quad 345 \\ \quad \times 26 \\ \hline 8,970 \end{array}$$

$$\begin{array}{r} 8.) \quad 706 \\ \quad \times 14 \\ \hline 9,884 \end{array}$$

$$\begin{array}{r} 9.) \quad 369 \\ \quad \times 53 \\ \hline 19,557 \end{array}$$

$$\begin{array}{r} 10.) \quad 524 \\ \quad \times 73 \\ \hline 38,252 \end{array}$$

+1 point for each correct answer

$$+ \quad /10 = \underline{\hspace{2cm}}\%$$

MATHEMATICS – 4th Grade

Activities and Assessments

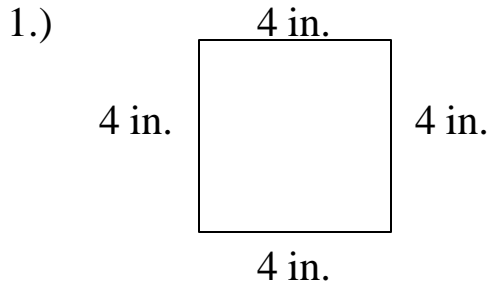
Standard 4: Understands and applies basic and advanced properties of the concepts of measurement.

1. Ahead of time, teacher photocopies enough of the assessment worksheet for each student.
2. Remind students to use labels in their answers.
3. Pass out assessment. Note to students what is included in grading criteria.

Name: _____

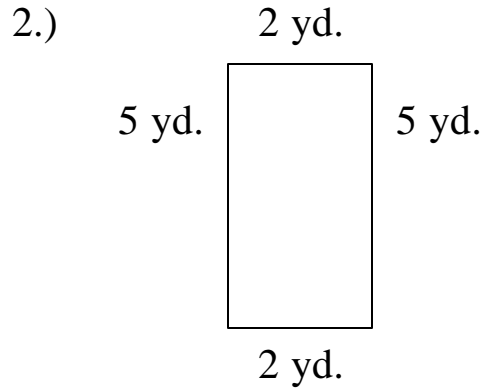
Perimeter

Directions: Find the perimeters of the following shapes. Show your work. Label each answer.



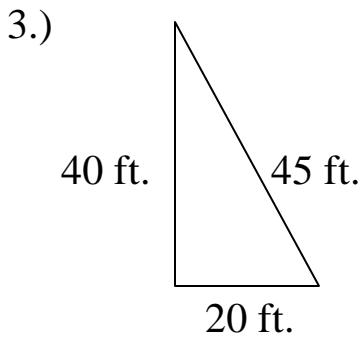
Show work:

Answer: _____



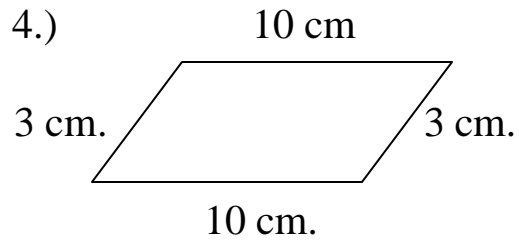
Show Work:

Answer: _____



Show Work:

Answer: _____



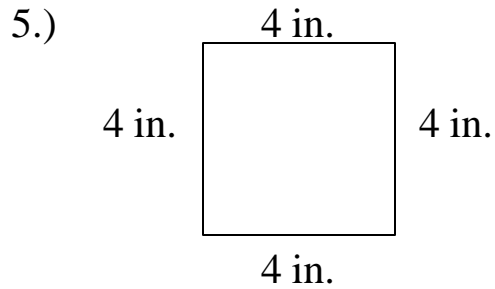
Show Work:

Answer: _____

Name: _____

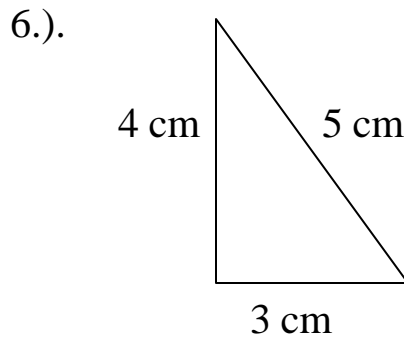
Area

Directions: Find the area of the following shapes. Show your work. Label each answer.



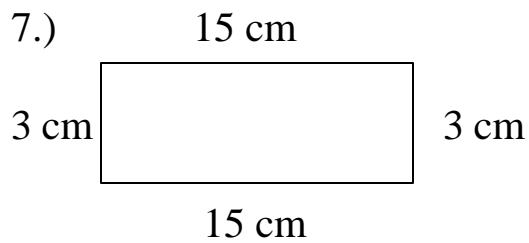
Show work:

Answer: _____



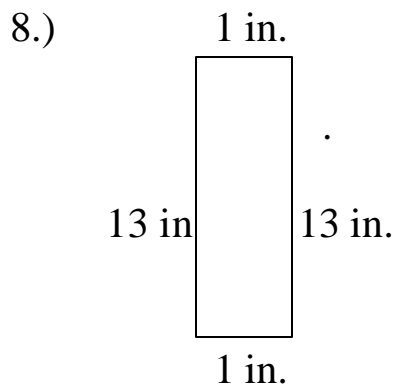
Show Work:

Answer: _____



Show work:

Answer: _____



Show Work:

Answer: _____

Assessment and Answer Key

Perimeter

$$\begin{array}{r} 1.) \quad 4 \\ \quad 4 \\ \quad 4 \\ \quad \underline{+4} \\ \quad 16 \text{ in. or 16 inches} \end{array}$$

$$\begin{array}{r} 2.) \quad 2 \\ \quad 5 \\ \quad 5 \\ \quad \underline{+2} \\ \quad 14 \text{ yds. or 14 yards} \end{array}$$

$$\begin{array}{r} 3.) \quad 40 \\ \quad 45 \\ \quad \underline{+20} \\ \quad 105\text{ft. or 105 feet} \end{array}$$

$$\begin{array}{r} 4.) \quad 10 \\ \quad 10 \\ \quad 3 \\ \quad \underline{+3} \\ \quad 26 \text{ cm. or 26 centimeters} \end{array}$$

Area

$$\begin{array}{r} 5.) \quad 4 \\ \quad \underline{\times 4} \\ \quad 16 \text{ inches}^2 \text{ or } 16 \text{ in}^2 \end{array}$$

$$\begin{array}{r} 6.) \quad 4 \quad (a = \frac{1}{2} bh) \\ \quad \underline{\times 3} \\ \quad 12 \end{array}$$

$$12 \div 2 = 6 \text{ cm}^2 \text{ or } 6 \text{ centimeters}^2$$

$$\begin{array}{r} 7.) \quad 15 \\ \quad \underline{\times 3} \\ \quad 45 \text{ centimeters}^2 \text{ or } 45 \text{ cm}^2 \end{array}$$

$$\begin{array}{r} 8.) \quad 13 \\ \quad \underline{\times 1} \\ \quad 13 \text{ in}^2 \text{ or } 13 \text{ inches}^2 \end{array}$$

NOTE:

For each problem:

+ 1 Showing work

+ 1 Answer

+ 1 Label

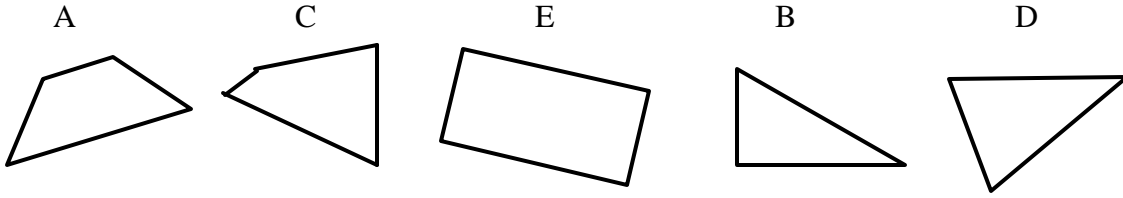
+ /24 = _____ %

MATHEMATICS – 4th Grade
Activities and Assessments

Standard 5: Understands and applies basic and advanced properties of the concepts of geometry.

After teaching concepts of geometry on analyzing polygons – *Parallel and Perpendicular Lines*, give the following assessment.

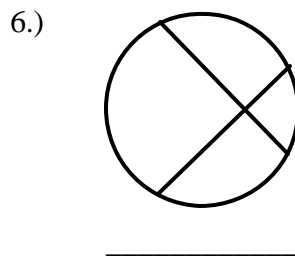
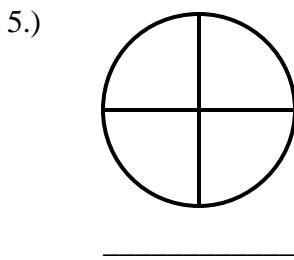
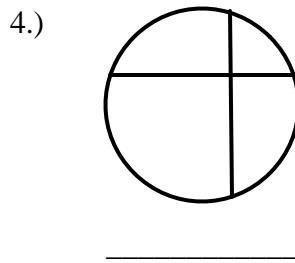
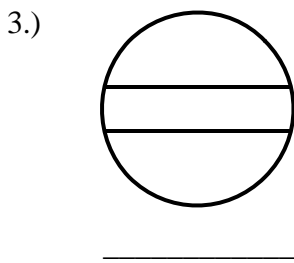
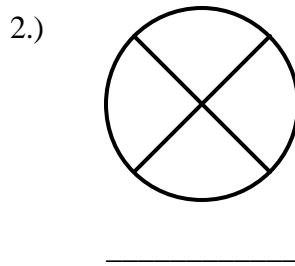
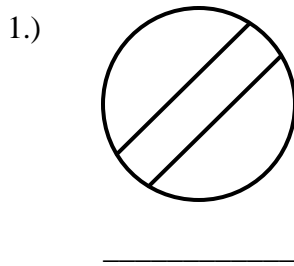
Name: _____



Part A: Write the letter of the figure described.

- 1.) A polygon with only one (1) pair of parallel sides _____
- 2.) A quadrilateral with no parallel or perpendicular sides _____
- 3.) A polygon with one (1) pair of perpendicular sides _____
- 4.) A polygon with two (2) pairs of parallel sides _____

Part B: Write the word parallel or perpendicular on the line.



Answer Key

Part A

- 1.) A
- 2.) C
- 3.) B
- 4.) E

Part B

- 1.) Parallel
- 2.) Perpendicular
- 3.) Parallel
- 4.) Perpendicular
- 5.) Perpendicular
- 6.) Perpendicular

$$+ \quad /10 = \underline{\hspace{2cm}}\%$$

MATHEMATICS – 4th Grade

Activities and Assessments

Standard 6: Understands and applies basic and advanced properties of the concepts of statistics and data analysis.

After teaching the concept of line graphs, give the following assessment.

Name: _____

Reading and Making Line Graphs

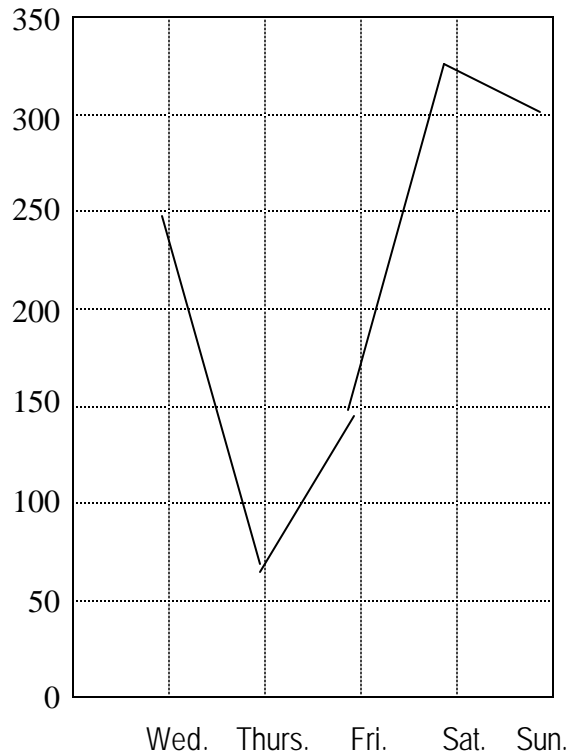
Answer these questions about the line graph.

1.) About how many people attended the fair on Friday?

2.) Which day had the lowest attendance?

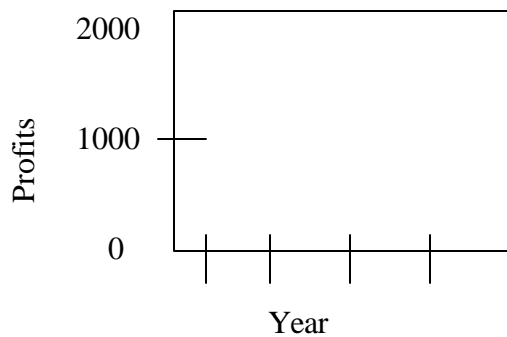
3.) On which day did about 250 people attend?

4.) On which days was the attendance greater than 250 people?



Complete the graph below to:

5.) Make a line graph for these data.



Profits from the Spring Fair			
1987	\$1,200	1988	\$1,450
1989	\$1,350	1990	\$1,600

Answer Key

1. 150 people
2. Thursday
3. Wednesday
4. Saturday & Sunday
5. Check student's graph (3 points)

$$+ \quad / 7 = \underline{\hspace{2cm}} \%$$

MATHEMATICS – 4th Grade
Activities and Assessments

Standard 7: Understands and applies basic and advanced concepts of probability.

After teaching Probability and Prediction, do the following activity to assess the students' understanding.

Probability

Answer Key

1. Answers will vary
2. Same chance for both, yes; there is one of every number
3. no, more odd than even numbers

MATHEMATICS – 4th Grade

Activities and Assessments

Standard 8: Understands and applies basic and advanced properties of functions and algebra.

Standard 9: Understands the general nature and use of mathematics.

After teaching Numbers and Patterns & Number Relationships, administer the following assessment.

Name: _____

Number Patterns

Directions: Choose the set of numbers that continues the number pattern. Write the pattern's rule on the space provided.

1. 2, 5, 8, 11, ...
a. 9, 13, 15
b. 14, 17, 20
c. 13, 16, 19
Rule: _____

2. 99, 95, 91, 87, ...
a. 84, 80, 76
b. 91, 88, 76
c. 83, 79, 75
Rule: _____

3. 2, 4, 8, 16, ...
a. 18, 20, 22
b. 32, 64, 128
c. 36, 72, 144
Rule: _____

4. 4, 16, 28, 40, ...
a. 52, 64, 76
b. 54, 68, 82
c. 42, 54, 66
Rule: _____

5. 1,111, 1,212, 1,313, 1,414, ...
a. 1,616, 1,707, 1,808
b. 1,414, 1,505, 1,616
c. 1,515, 1,616, 1,717
Rule: _____

Number Patterns

Answer Key

- 1.) B Rule: + 3
- 2.) C Rule: - 4
- 3.) B Rule: x 2
- 4.) A Rule: + 12
- 5.) C Rule: + 101

For each problem:
+1 Point for correct rule
+1 for correct letter (multiple choice)

$$+ \quad /10 = \underline{\hspace{2cm}} \%$$