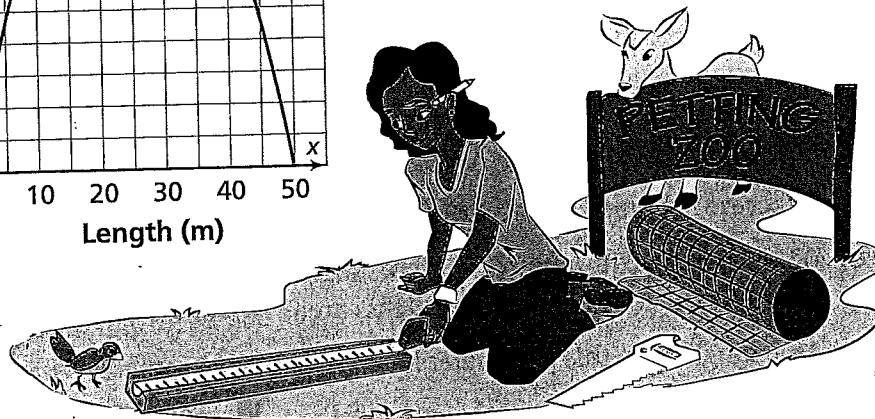
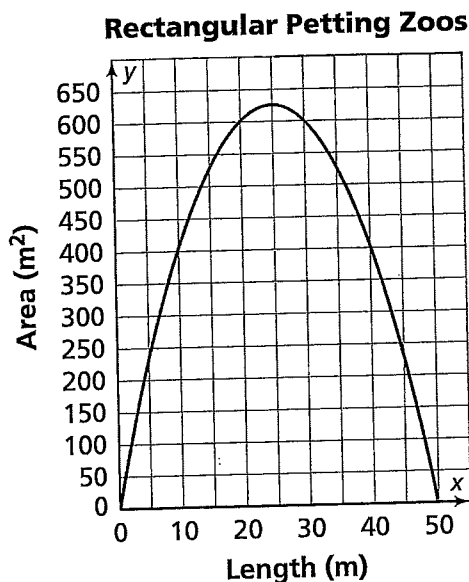


Week #14

AAA HW Mixed Review  
Week of 11/17

Name: \_\_\_\_\_

5. Hillsdale Farms wants to add a small, rectangular petting zoo for the public. They have a fixed amount of fencing to use for the zoo. This graph shows the lengths and areas of the rectangles they can make.



- Describe the shape of the graph and any special features you observe.
- What is the greatest area possible for a rectangle with this perimeter? What are the dimensions of this rectangle?
- What is the area of the rectangle with a length of 10 meters? What is the area of the rectangle with a length of 40 meters? How are these rectangles related?
- What are the dimensions of the rectangle with an area of 600 square meters?
- What is the fixed amount of fencing available for the petting zoo? Explain.

Student Name: \_\_\_\_\_

Score: \_\_\_\_\_

**Adding and Subtracting Numbers in Scientific Notation**

*Example:*  $7.4 \times 10^2 + 2.735 \times 10^6$

$$\begin{aligned} &7.4 \times 10^2 + 2.735 \times 10^6 \\ &= 0.00074 \times 10^6 + 2.735 \times 10^6 \\ &= (0.00074 + 2.735) \times 10^6 \\ &= 2.73574 \times 10^6 \end{aligned}$$

Answer:  **$2.73574 \times 10^6$**

$2 \times 10^3 - 1.9 \times 10^2$

Answer:

$5.2 \times 10^7 + 3.01 \times 10^4$

$2.005 \times 10^5 - 8.664 \times 10^2$

Answer:

Answer:

$6.2 \times 10^5 + 9.7 \times 10^1$

$7.32 \times 10^6 - 4.01 \times 10^8$

Answer:

Answer:

Name \_\_\_\_\_

Date \_\_\_\_\_

**Scientific Notation Addition and Subtraction - Matching Worksheet**

Find the sums and differences. Write the letter of the answer that matches the problem.

1.  $11 \times 10^4 + 5.8 \times 10^3$

\_\_\_\_\_

a.  $0.06285 \times 10^8$

2.  $5 \times 10^5 + 11.10 \times 10^5$

\_\_\_\_\_

b.  $-3.61 \times 10^3$

3.  $3 \times 10^2 + 9.15 \times 10^3$

\_\_\_\_\_

c.  $16.10 \times 10^5$

4.  $11 \times 10^5 + 7.5 \times 10^4$

\_\_\_\_\_

d.  $-10.692 \times 10^5$

5.  $21 \times 10^4 + 17.5 \times 10^3$

\_\_\_\_\_

e.  $117.5 \times 10^4$

6.  $11 \times 10^2 - 4.71 \times 10^3$

\_\_\_\_\_

f.  $11.58 \times 10^4$

7.  $13 \times 10^4 - 9.95 \times 10^2$

\_\_\_\_\_

g.  $22.75 \times 10^3$

8.  $158 \times 10^2 - 10.85 \times 10^5$

\_\_\_\_\_

h.  $12.9005 \times 10^4$

9.  $0.075 \times 10^8 - 12.15 \times 10^5$

\_\_\_\_\_

i. 100

10.  $125 \times 10^6 - 25 \times 10^6$

\_\_\_\_\_

j.  $9.45 \times 10^3$



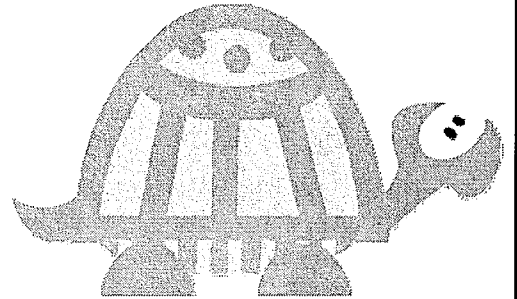
Name \_\_\_\_\_

Date \_\_\_\_\_

### Pythagorean Theorem Word Problems- Independent Practice Worksheet

Complete all the problems.

1. Find the hypotenuse of a triangle with a base of 11 cm and height of 9 cm.



2. Tommy the Turtle wanders off in the zoo. Mr. Gorilla saw him walk to the "T" on Clancy Road and make a right. The T is 1.2 miles from Tommy's pen. Gilbert Giraffe saw Tommy sitting outside the giraffe area. The giraffe area is 1.6 miles from the "T". Exactly how far is Tommy the Turtle from his pen?

3. Tom is afraid of heights above 9 feet. He is asked to repair a side of a high deck. The bottom of a ladder must be placed 6 feet from a deck. The ladder is 10 feet long. How far above the ground does the ladder touch the deck? Is Tom afraid of the height?

4. Maria walked 3 km west and 4 km south. Calculate how far she is from her starting point.

5. Lena's guest house is 15 m long and 12 m wide. How long is the diagonal of the house?

6. David leaves the house to go to school. He walks 200 m west and 125 m north. Calculate how far he is from the starting point.

7. Laptop screen sizes are determined by the length of the diagonal portion of the screen, rounded to the nearest whole number. A laptop screen has a 10 inch width and the height measures 8 inches. Calculate the screen size.

