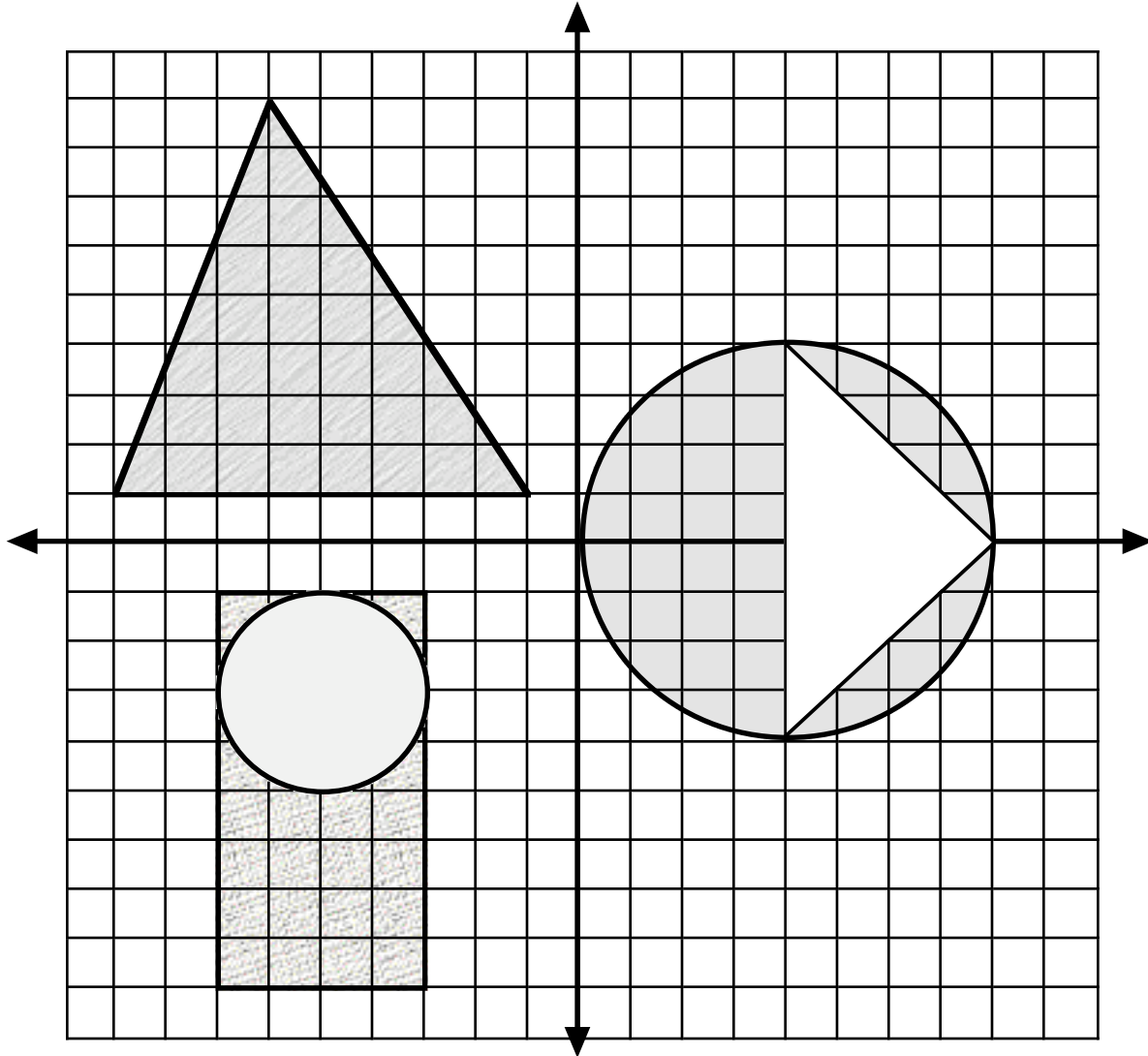


*Graphing on the Coordinate Plane*  
Problem Set 2.3

Name \_\_\_\_\_

*Label the quadrants and axes*



Questions:      Separate sheet of paper

- Find the exact area of the geometric figure in quadrant II
- Find the exact circumference and area of the figures in Quadrants I and Quadrant IV.

Develop a numerical expression that will show the exact area inside the circle but outside the triangle.

- Develop a numerical expression for the area inside the rectangle but outside the circle in Quadrant III

# Graphing on the Coordinate Plane

Problem Set 2.3

Name \_\_\_\_\_

## Real Numbers

Rational  
Irrational

(can be expressed as a fraction)  
(cannot be expressed as a fraction)

$\pi$

28



square root

"A square with an area of \_\_\_\_\_. What is the length of a side?"

perfect square roots between 1 and 225 (15)

210 square roots between 1 - 225 are irrational



between



and



and



## Absolute Value

(distance from zero, always +)

$$|m| = 4$$

= 4

two equations to solve

$$m = 4$$

OR

$$m = -4$$

$$|x + 5| = 7$$

= 7

two equations to solve

$$x + 5 =$$

OR

$$x + 5 =$$

$$|2y - 3| = 9$$

= 9

two equations to solve

## Meaning of '-' sign

(opposite of)

### Expression

$$2x + 3$$

### Equation

$$2x + 3 = 11$$

### Inequality

$$2x + 3 > 11$$

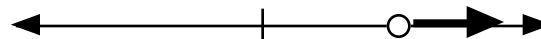
coefficient

variable term

variable

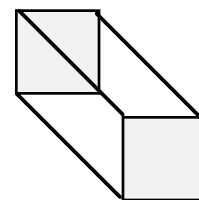
constant

graphical representation



## Surface Area

The face of this right rectangular prism is 5 cm by 6 cm.  
The depth is 10 cm. Find the total surface area



# Graphing on the Coordinate Plane

Problem Set 2.3

Name \_\_\_\_\_

## Circles

A cement truck's wheels are 4 feet in diameter. If the wheels make 12 complete revolutions, approximately how many yards has the truck traveled ?

## Problem Solving

The length rectangle is 3 feet more than twice the width. If the perimeter is 54 inches, what is the length of one side ?

## Percent of increase/decrease

Tickets for the Z Z To concert were reduced from \$ 50 to \$ 39 . By what percent were the tickets reduced.

I mistakenly divided a number by 5 when I should have multiplied it by 5. Find my percent of error?

## Simplify

$$-3 - (-5) - 2 + (-1) - (-4) - (-2a) - (-1) - 2a$$

## Functions

Input = Output

Domain - Range

restrictions on domain

## Problems

$$7 \frac{3}{8} - 2 \frac{4}{5}$$

$$1 \frac{2}{3} + 2 \frac{3}{4} + \frac{5}{8}$$

$$5 \frac{2}{5} \cdot \frac{5}{11}$$

$$6 \frac{3}{4} \div \frac{4}{9}$$

## Distributive property twice

$$(2m + 3)(m + 4)$$

$$(2x + 5)(x - 4)$$

## Find 15%

employing the 10% - 15% method

$$15\% \text{ of } 36 = 10\% + 5\% =$$