

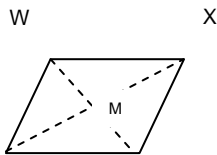
Flashcards: Perimeter and Area

Directions: Name the following figure described below.

Questions:

1. Find the perimeter and area of a square with side length 6 inches.
2. Find the perimeter and area of a rectangle with length 10 cm and width 16 cm.
3. Find the perimeter of a rhombus with side length 5 feet.
4. 4 sided polygons with sides measuring 8, 8, 12, 12
5. Find the perimeter of the following rhombus.

<image 5.3.17a>

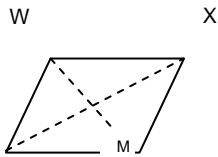


$$WY=18 \text{ ft}$$

$$XZ=24 \text{ ft}$$

6. Find the area of the following rhombus.

<image 5.3.17a>



z y

$$WY = 18 \text{ ft}$$

$$XZ = 24 \text{ ft.}$$

7. The perimeter of a rhombus is 210 cm. The length of one side is $(3x + 30)$ cm. What is the value of x ?

8. The area of rhombus ABCD is 200 in^2 . Segment AC measures 10 inches and segment BD measures $(5x + 5)$ inches. What is the value of x ?

Answers:

1. $P = 4s$

$$P = 4(6) = 24 \text{ inches}$$

$$A = s^2$$

$$A = 6^2 = 36 \text{ square inches}$$

2. $P = 2L + 2W$

$$P = 2(10) + 2(16) = 52 \text{ cm}$$

$$A = LW$$

$$A = (10)(16) = 160 \text{ cm}^2.$$

$$3. P = 4s$$

$$P = 4(5)$$

$$P = 20 \text{ ft}^2$$

$$A = \frac{1}{2} d_1 \cdot d_2$$

$$4. A = \frac{1}{2} (10)(14)$$

$$A = 70 \text{ in}^2$$

$$W M = \frac{1}{2} W Y$$

$$W M = \frac{1}{2} (18) = 9$$

$$5. X M = \frac{1}{2} X Z$$

$$X M = \frac{1}{2} (24) = 12$$

$$WM^2 + XM^2 = WX^2$$

$$9^2 + 12^2 = WX^2$$

$$81 + 144 = WX^2$$

$$225 = WX^2$$

$$WX = 15$$

$$P = 4s$$

$$P = 4(15) = 60 \text{ ft}^2$$

$$A = \frac{1}{2}d_1 \cdot d_2$$

$$6. \quad A = \frac{1}{2}(18)(24)$$

$$A = 216 \text{ ft}^2$$

$$7. \quad P = 4s$$

$$210 = 4(3x + 30)$$

$$210 = 12x + 120$$

$$90 = 12x$$

$$7.5 = x$$

$$A = \frac{1}{2}d_1 \cdot d_2$$

$$200 = \frac{1}{2}(10)(5x + 5)$$

$$200 = 5(5x + 5)$$

$$8. \quad 200 = 25x + 25$$

$$175 = 25x$$

$$7 = x$$