

11-1-18

Aim: SWBAT find the perimeter of geometric shapes.

HW: Packet Page 14

Quiz tomorrow (Packet Pages 1 - 11)

Do Now: Packet Page 12

HOMEWORK - ADD or SUBTRACT POLYNOMIALS

Add or subtract the following polynomials.

1) $(x^2 + 3x + 2) + (3x^2 + 4x - 9)$

$$x^2 + 3x + 2 + 3x^2 + 4x - 9$$

$$4x^2 + 7x - 7$$

3) $(5ab + 2ac - 6bc) + (-4ac + 2bc)$

$$5ab + 2ac - 6bc - 4ac + 2bc$$

$$5ab - 2ac - 4bc$$

5) $(2a^2 + 4a - 1) - (a - 6a^2 + 2)$

$$2a^2 + 4a - 1 - a + 6a^2 - 2$$

$$8a^2 + 3a - 3$$

7) $(5n^2 + 2n - 9) + (3n^2 - 4)$

$$5n^2 + 2n - 9 + 3n^2 - 4$$

$$8n^2 + 2n - 13$$

9) $(x + 15y - 9z) - (7x - 8y + z)$

$$x + 15y - 9z - 7x + 8y - z$$

$$-6x + 23y - 10z$$

11) $(4x^3 + 5x^2 - 2x - 5) - (3x^3 - 4x + 2)$

$$4x^3 + 5x^2 - 2x - 5 - 3x^3 + 4x - 2$$

$$x^3 + 5x^2 + 2x - 7$$

2) $(6m^2 + 2m - 3) - (7m^2 + 4)$

$$6m^2 + 2m - 3 - 7m^2 - 4$$

$$-m^2 + 2m - 7$$

4) $(6x^2 - 3x + 1) + (3x^3 + 4x^2 - 5x)$

$$6x^2 - 3x + 1 + 3x^3 + 4x^2 - 5x$$

$$3x^3 + 10x^2 - 8x + 1$$

6) $(6r^2x + 5rx^2) - (9rx^2 - 9r^2x)$

$$6r^2x + 5rx^2 - 9rx^2 + 9r^2x$$

$$15r^2x - 4rx^2$$

8) $(3p^2 - p - 1) + (p^2 + p - 4)$

$$3p^2 - p - 1 + p^2 + p - 4$$

$$4p^2 - 5$$

10) $(4r^2 - r + 8) - (r^2 + 6r - 1)$

$$4r^2 - r + 8 - r^2 - 6r + 1$$

$$3r^2 - 7r + 9$$

12) $(2mn + 3a + 7d) + (-5mn + 7a)$

$$2mn + 3a + 7d - 5mn + 7a$$

$$10a + 7d - 3mn$$

AIM: SWBAT find the perimeter of geometric shapes.

DO NOW:

Find each sum or difference.

1) $(3x + 10) + (6x - 15)$
 $3x + 10 + 6x - 15$
 $9x - 5$

2) $(x^2 + 9x) - (5x^2 - 3x)$
 $x^2 + 9x - 5x^2 + 3x$
 $-4x^2 + 12x$

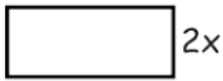
3) $(-5x^2 + 8x + 12) + (3x^2 - 4x + 8)$
 $-5x^2 + 8x + 12 + 3x^2 - 4x + 8$
 $-2x^2 + 4x + 20$

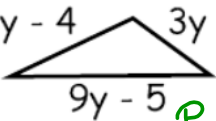
4) $(6x^2 - 11x - 17) - (9x^2 - 8x - 12)$
 $6x^2 - 11x - 17 - 9x^2 + 8x + 12$
 $-3x^2 - 3x - 5$

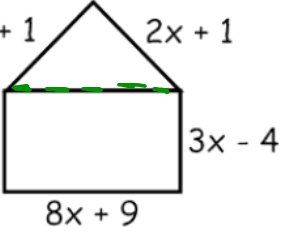
CLASSWORK:

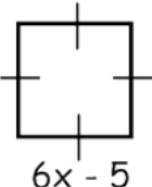
Perimeter is the distance around the outside of a polygon. You find perimeter by adding up all the sides of a polygon.

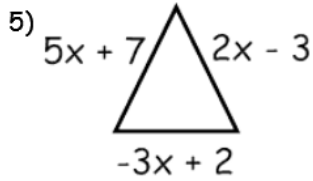
Find the perimeter of each polygon. Show all work step-by-step.

1) $5x + 3$

 $P = 2l + 2w$
 $P = 2(5x + 3) + 2(2x)$
 $P = 10x + 6 + 4x$
 $P = 14x + 6$ units

2) $8y - 4$ $3y$

 $P = (8y - 4) + (3y) + (9y - 5)$
 $P = 8y - 4 + 3y + 9y - 5$
 $P = 20y - 9$ units

3) $2x + 1$ $2x + 1$

 $P = 2(2x + 1) + 2(3x - 4) + 8x + 9$
 $P = 4x + 2 + 6x - 8 + 8x + 9$
 $P = 18x + 3$ units

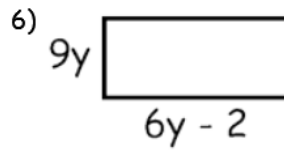
4) $6x - 5$

 $P = 4s$
 $P = 4(6x - 5)$
 $P = 24x - 20$ units



$$P = (5x+7) + (2x-3) + (-3x+2)$$

$$P = 5x+7 + 2x-3 - 3x+2$$

$$P = 4x+6 \text{ units}$$



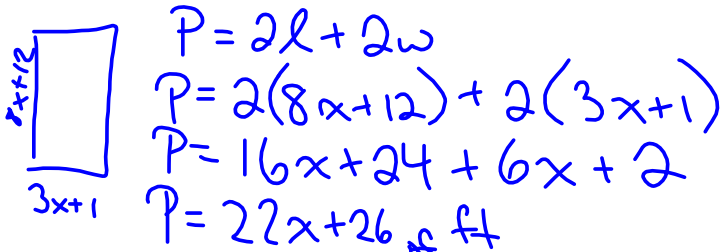
$$P = 2l + 2w$$

$$P = 2(6y-2) + 2(9y)$$

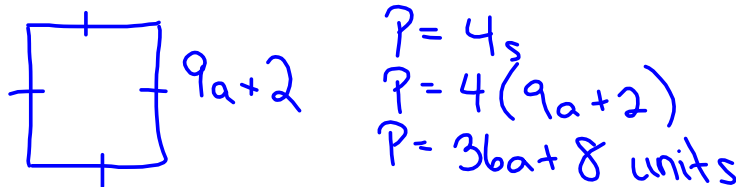
$$P = 12y-4 + 18y$$

$$P = 30y-4 \text{ units}$$

- 7) Jeremiah is building a **rectangular** dog run. He has determined the length will be $8x + 12$ feet and the width will be $3x + 1$ feet. Write an expression that Jeremiah can use to calculate how much fencing he needs for the perimeter of the dog run. (Draw a diagram)



- 8) Tanya is making a piece of modern art. She wants to paint a violet stripe around the edge of the **square** canvas. The edge of the canvas can be represented by $9a + 2$. What is the perimeter of Tanya's canvas? (Draw a diagram)



- 9) Jorge has a triangular fire pit in his backyard. In order to keep his dog safe he wants to install a small fence around the fire pit. The longest side of the fire pit is 3 feet long. The two remaining sides can be represented together by the expression $7x - 2$. How much fencing does Jorge need to purchase to go around the entire perimeter of the fire pit?

$$P = 3 + 7x - 2$$

$$P = 7x + 1 \text{ ft}$$

HOMEWORK - PERIMETER

1) Simplify the following expression: $(8x-7)-(6-2x)+(4x+11)$

2) Simplify: $2(3ac+4bc)-3(5bc-15ab)-(2ab+bc-2ca)$

* 3) Find the **sum** of $(8a+3b)$ and $(5a-2b-c)$

$$[(8a+3b)+(5a-2b-c)]$$

4) Find the perimeter of a **rectangle** if the length is (x^2-3x+2) and the width is $(3x-7)$

5) Find the perimeter of an **equilateral** triangle if each side is $5x^3+3y$.

3 = sides

6) Find the **perimeter** of an **isosceles** triangle if the base measures $7xy+9x$ and each of the other sides measures $2xy-5x$.

2 are the same

7) Find the **perimeter** of a **square** that has a side length of $3x^2+7x$.

* 8) **SUBTRACT** $(3a+4b-2c)$ **FROM** $(13a+b-c)$

$$(13a+b-c) - (3a+4b-2c)$$