

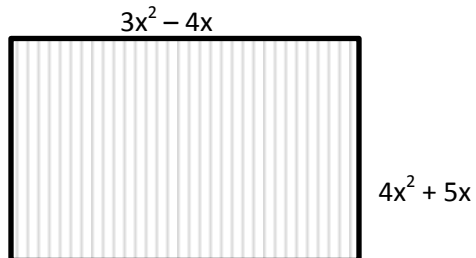
POLYNOMIALS:
PERIMETER AREA VOLUME
worksheet

Name: _____

Polynomial Applications: Perimeter, Area, and Volume

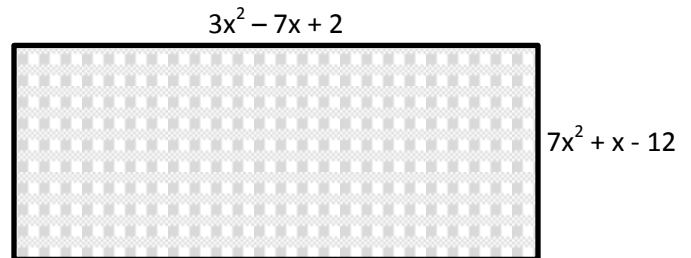
Directions: Find the PERIMETER of each of the following shapes.

1.



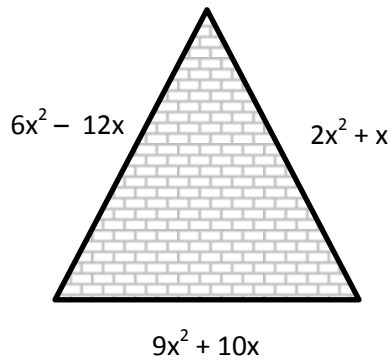
P = _____

2.



P = _____

3.



P = _____

4. The width of a rectangle is $5x - 4$. The perimeter of the rectangle is $14x + 4$. What is the length of the rectangle?

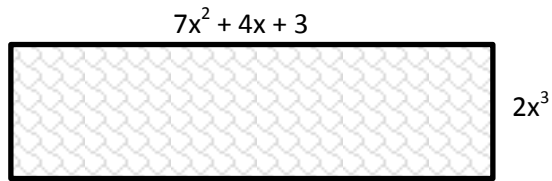
- a. $2x - 6$
- b. $2x + 6$
- c. $9x + 8$
- d. $9x - 8$



Name: _____

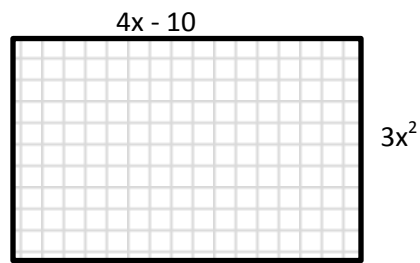
Directions: Find the AREA of each of the following shapes.

5.



A = _____

6.



A = _____

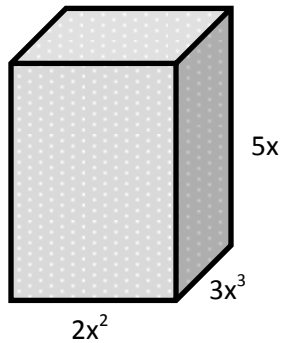
7. Length of a rectangle is $4x^2 + 12x$ and the area of the rectangle is $24x^4 + 72x^3$, what is the width of the rectangle?

- a. 6
- b. $6x$
- c. $6x^2$
- d. $6x^3$



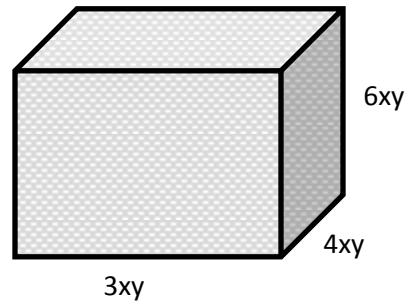
Directions: Find the VOLUME of the following shapes.

8.



V = _____

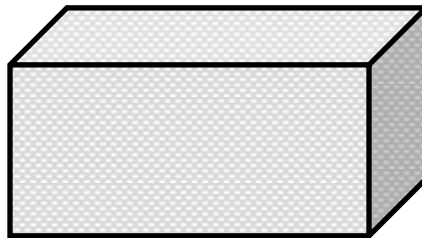
9.



V = _____

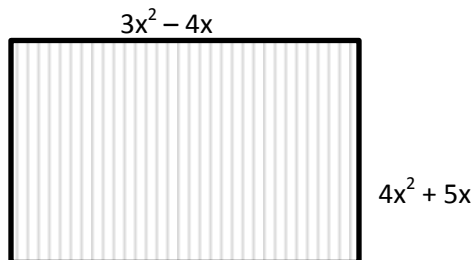
10. If the length of a rectangular prism is $4x^2$, the width is $6x^3$, and the volume is $48x^8$, what is the height of the rectangular prism?

- a. $2x^3$
- b. $2x^2$
- c. $2x$
- d. 2



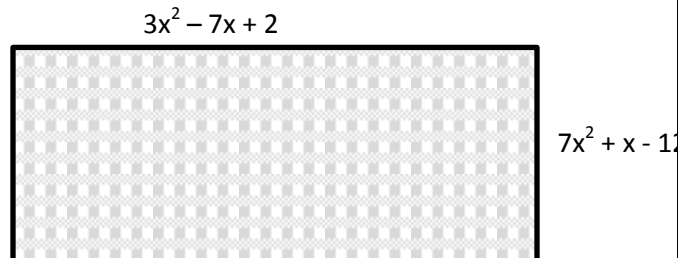
Polynomial Applications: ANSWER KEY**Perimeter, Area, and Volume****Directions:** Find the PERIMETER of each of the following shapes.

1.



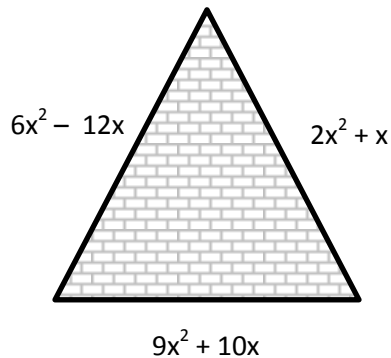
$$P = 14x^2 + 2x$$

2.



$$P = 20x^2 - 12x - 20$$

3.



$$P = 17x^2 - x$$

4. The width of a rectangle is $5x - 4$. The perimeter of the rectangle is $14x + 4$. What is the length of the rectangle?

a. $2x - 6$

b. $2x + 6$

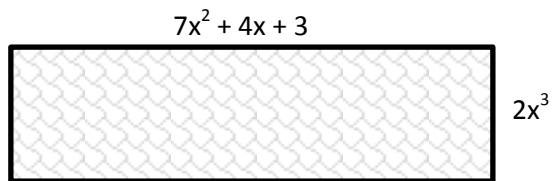
c. $9x + 8$

d. $9x - 8$



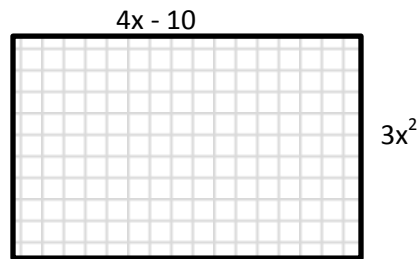
Directions: Find the AREA of each of the following shapes.

5.



$$A = 14x^5 + 8x^4 + 6x^3$$

6.



$$A = 12x^3 - 30x^2$$

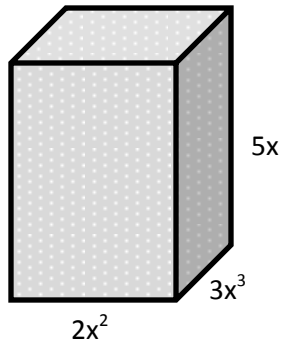
7. Length of a rectangle is $4x^2 + 12x$ and the area of the rectangle is $24x^4 + 72x^3$, what is the width of the rectangle?

- a. 6
- b. $6x$
- c. $6x^2$
- d. $6x^3$



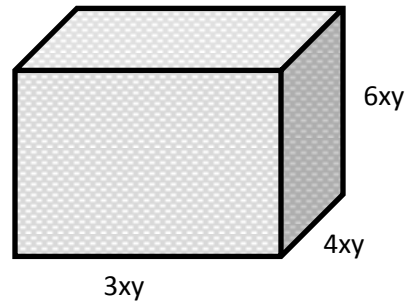
Directions: Find the VOLUME of the following shapes.

8.



$$V = 30x^6$$

9.



$$V = 72x^3y^3$$

10. If the length of a rectangular prism is $4x^2$, the width is $6x^3$, and the volume is $48x^8$, what is the height of the rectangular prism?

- a. $2x^3$
- b. $2x^2$
- c. $2x$
- d. 2

