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QUESTIONS

2, 6 , 9, 10 , 11 , 12 a, d

15 a, c, e, g,h, 16 , 19 b

22 a,c,h,k,l, 24 a,

26 b,d,f,h 28 b, d, f

29 a, b

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QUESTIONS
1 TO 8

Review

2) Complete the following chart:

	Type	Variable	Coefficient	Constant	Degree
a) $4w - 3$					
b) $5v^2 + 3$					
c) $5y - 6 - y^2$					

6)Write the polynomial expression that is represented by the following algebra tiles

a) 

b) 

c) 

9. Identify like terms.

a) $5x^2, 3y^2, -2x^2, 5x, 2y$

b) $-8x, 5x, 8, -2, -x, 11$

10. Match each algebra tile model below with its corresponding polynomial.

a) $n^2 - n + 3$ b) $-w^2 - 3$

c) $-2t$ d) $2q + 2$

e) $2r^2 - 2r + 1$

A

B

C

D

E

11. Write an expression with 5 terms that has only 3 terms when simplified.

12. Simplify by combining like terms.

a) $3x + 4 - 2x - 8 + 3x - 3$

d) $2a^2 + 3a + 3a^2 - a^2 - a - 4a^2$

15. Add or subtract as indicated.

a) $(p^2 + 3p + 5) + (3p^2 + p + 1)$

c) $(6 - 3r + 7r^2) - (9 + 4r + 3r^2)$

e) $(-4t^2 - 3t + 9) - (-2t^2 - 5t - 1)$

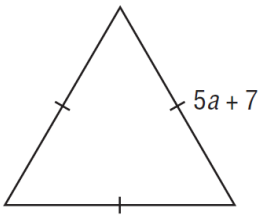
g) $(3a^2 + 5ab - 7b^2) + (3b^2 - 10ab - 7a^2)$

h) $(10xy - 3y^2 + 2x) - (5y - 4x^2 + xy)$

16. The sum of two polynomials is $15c + 6$. One polynomial is $3c - 7$. What is the other polynomial? Explain how you found it.

19. Write a polynomial for the perimeter of each shape. Simplify the polynomial. Determine each perimeter when $a = 3$ cm.

b)



22. Determine each product or quotient.

a) $10k \div 2$

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

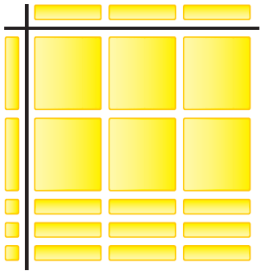
h) $-2(1 - 2n + 3n^2)$

k) $\dfrac{15 - 21q + 6q^2}{-3}$

l) $(2 + 5n - 7n^2)(-6)$

5.6 **24.** Write the multiplication sentence modelled by each diagram.

a)



26. Determine each product.

b) $(-3g)(-5g)$

d) $-5t(t-3)$

f) $(-3f-5)(-2f)$

h) $y(1-y)$

28. Determine each quotient.

b) $\frac{24x}{3x}$ **d)** $(-8a^2 - 12a) \div 4a$ **f)** $\frac{14y^2 - 21y}{-7y}$

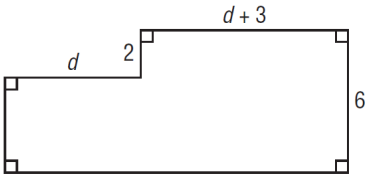
29. **a)** The area of a rectangular deck is $(8d^2 + 20d)$ square metres. The deck is $4d$ metres long. Determine a polynomial that represents the width of the deck.

b) What are the dimensions and area of the deck when d is 4 metres?

Practice Test

1. a) Which polynomial in t do these tiles represent?

2. a) Write a polynomial for the perimeter of this shape. Simplify the polynomial.



b) Determine the perimeter of the shape when $d = 5$ m.

3. Sketch algebra tiles to explain why:

a) $3x + 2x$ equals $5x$

b) $(3x)(2x)$ equals $6x^2$

4. A student determined the product $3r(r + 4)$.
The student's answer was $3r^2 + 4$.
Use a model to explain whether the student's answer is correct.

5. Add or subtract as indicated.

a) $(15 - 3d) + (3 - 15d)$

b) $(9h + 3) - (9 - 3h^2)$

d) $(7y^2 + y) - (3y - y^2)$

c) $(2y^2 + 5y - 6) + (-7y^2 + 2y - 6)$

6. Multiply or divide as indicated.

a) $25m(3m - 2)$

b) $-5(3v^2 - 2v - 1)$

c) $(8x^2 - 4x) \div 2x$

d) $\dfrac{-6 + 3g^2 - 15g}{-3}$

7. Determine two polynomials with:

a) a sum of $3x^2 - 4x - 2$

b) a difference of $3x^2 - 4x - 2$

8. A rectangle has dimensions $5s$ and $3s + 8$.

a) Sketch the rectangle and label it with its dimensions.

b) What is the area of the rectangle?

c) What is the perimeter of the rectangle?