GSE Algebra 1 Unit 1 - RELATIONSHIPS BETWEEN QUANTITIES AND EXPRESSIONS EOC Review

Name: _____ Block: _____

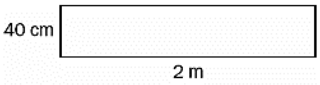
1. Rewrite.

$$\sqrt{2} \cdot \sqrt{72} \cdot \sqrt{5}$$

2. Is the sum of $\sqrt{3}$ and $\frac{1}{3}$ rational or irrational?

3. Is the sum of $0.0\overline{675}$ and 8 rational or irrational?

4. A rectangle has a length of 2 meters and a width of 40 centimeters. What is the perimeter of the rectangle?



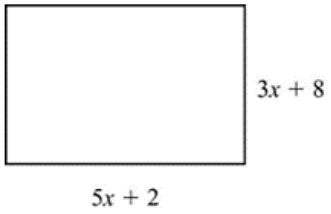
5. Consider the expression

$$3n^2 + n + 2.$$

a. What is the coefficient of n?

b. What terms are being added in the expression?

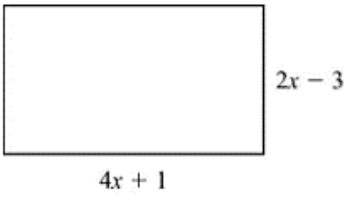
6. What is the perimeter of the rectangle?



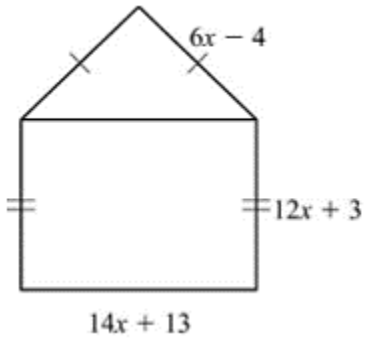
7. Rewrite the expression

$(x^3 + 2x^2 - x) - (-x^3 + 2x^2 + 6)$.

8. What is the area of the patio,?



	Answers
1. Look at the radical. $-8\sqrt{726}$ What is the rewritten form of the radical? A. $-88\sqrt{6}$ B. -90.75 C. $-986\sqrt{6}$ D. $-2{,}904$	1. _____
2. Look at the expression. $2\sqrt{8} \cdot \sqrt{20}$ Which of these is equivalent to the expression? A. $2\sqrt{28}$ B. 5 C. $8\sqrt{10}$ D. $32\sqrt{10}$	2. _____
3. Which sum is rational? A . $\pi + 18$ B . $\sqrt{25} + 1.75$ C . $\sqrt{3} + 5.5$ D . $\pi + \sqrt{2}$	3. _____
4. Which product is irrational? A . $\sqrt{2} \cdot \sqrt{50}$ B . $\sqrt{64} \cdot \sqrt{4}$ C . $\sqrt{9} \cdot \sqrt{49}$ D . $\sqrt{10} \cdot \sqrt{8}$	4. _____
5. A rectangle has a length of 12 meters and a width of 400 centimeters . What is the perimeter, in cm, of the rectangle? A . 824 cm B . 1,600 cm C . 2,000 cm D . 3,200 cm	5. _____
6. Jill swam 200 meters in 2 minutes 42 seconds . If each lap is 50 meters long, which is MOST LIKELY to be her time, in seconds, per lap? A . 32 seconds B . 40 seconds C . 48 seconds D . 60 second	6. _____

	Answers
7. In which expression is the coefficient of term "n" – 1? A . $3n^2 + 4n - 1$ B . $-n^2 + 5n + 4$ C . $-2n^2 - n + 5$ D . $4n^2 + n - 5$	7. _____
8. The expression s2 is used to calculate the area of a square, where s is the side length of the square . What does the expression (8x)2 represent? A . the area of a square with a side length of 8 B . the area of a square with a side length of 16 C . the area of a square with a side length of 4x D . the area of a square with a side length of 8	8. _____
9. What is the product of 7x – 4 and 8x + 5 ? A . 15x + 1 B . 30x + 2 C . $56x^2 + 3x - 20$ D . $56x^2 - 3x + 20$	9. _____
10. What is the perimeter, in units, of the model? A . 32x + 12 units B . 46x + 25 units C . 50x + 11 units D . 64x + 24 units  	10. _____
11. Which expression has the same value as the expression (8x2 + 2x – 6) – (5x2 – 3x + 2)? A . $3x^2 - x - 4$ B . $3x^2 + 5x - 8$ C . $13x^2 - x - 8$ D . $13x^2 - 5x - 4$	11. _____