Name: Key Date:

EOC Practice Problems

1. Look at the radical $-8\sqrt{726}$. What is a rewritten form of the radical? Calculator

A. $-88\sqrt{6}$ B. -90.75 C. $-986\sqrt{6}$ D. -2904

2. Look at the expression $2\sqrt{8}\cdot\sqrt{20}$. Which of these is equivalent to this expression?
Calculator

A. $2\sqrt{28}$ B. 5 C. $8\sqrt{10}$ D. $32\sqrt{10}$

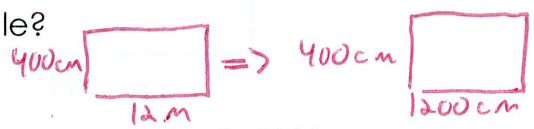
3. Which sum is rational?
perfect square

A. $\pi+18$ B. $\sqrt{25}+1.75$ C. $\sqrt{3}+5.5$ D. $\pi+\sqrt{2}$

4. Which product is irrational? Whole number = rational
Decimal that stops or repeats = rational

A. $\sqrt{2}\cdot\sqrt{50}$ B. $\sqrt{64}\cdot\sqrt{4}$ C. $\sqrt{9}\cdot\sqrt{49}$ D. $\sqrt{10}\cdot\sqrt{8}$

5. A rectangle has a length of 12 meters and a width of 400 centimeters. What is the perimeter, in cm, of the rectangle?



400
1200
400
+1200
3200

A. 824 cm B. 1600 cm C. 2000 cm D. 3200 cm

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?

$\frac{200}{50}=4$ 2 min 42 sec = 162 sec $\frac{162}{4}=40.5$ seconds

A. 32 seconds B. 40 seconds C. 48 seconds D. 60 secs

7. In which expression is the coefficient of term "n" -1?

A. $3n^2 + 4n - 1$
B. $-n^2 + 5n + 4$
C. $-2n^2 - n + 5$ $= -2n^2 - 1n + 5$
D. $4n^2 + n - 5$

8. The expression s^2 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?

$s^2 \rightarrow s$ is side length

$(8x)^2 \rightarrow 8x$ is side length

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 8x

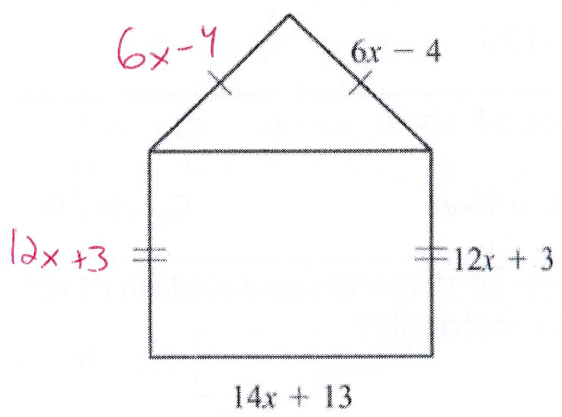
9. What is the product of 7x – 4 and 8x + 5?

$(7x-4)(8x+5)$

$56x^2 + 35x - 32x - 20$

A. 15x + 1 B. 30x + 2 C. $56x^2 + 3x - 20$ D. $56x^2 - 3x + 20$

10. A model of a house is shown. What is the perimeter, in units, of the model?



$6x - 4$

$6x + 4$
$6x - 4$
$12x + 3$
$14x + 13$
$+ \; 12x + 3$
$50x + 11$

A. 32x + 12 units
B. 46x + 25 units
C. 50x + 11 units
D. 64x + 24 units

11. Which expression has the same value as the expression?

$$(8x^2 + 2x - 6) - (5x^2 - 3x + 2)$$

$8x^2 + 2x - 6 - 5x^2 + 3x - 2$

$3x^2 + 5x - 8$

A. $3x^2 - x - 4$
B. $3x^2 + 5x - 8$
C. $13x^2 - x - 8$
D. $13x^2 - 5x - 4$