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|  |  | AlOBEl | bral Qobitida <br> 't forget the last page!! | 5.1 <br> Stamp |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 3 \\ & 0 \\ & 0 \\ & 0 \\ & 2 \end{aligned}$ | 2/16/2015 | Objective: | No School |  |
|  |  | Assignment: | Staff Development |  |
| $\begin{aligned} & \pi \\ & 0 \\ & 0 \\ & \hline \end{aligned}$ | 2/17/2015 | Objective: | Multiplying Polynomials |  |
|  |  | Assignment: | Practice \#1-10 |  |
| $\begin{aligned} & 7 \\ & 0 \\ & 0 \\ & 0 \\ & \hline \\ & 8 \\ & 3 \end{aligned}$ | 2/18/2015 | Objective: | Multiplying Polynomials Day 2 |  |
|  |  | Assignment: | Practice \#1-10 |  |
|  | 2/19/2015 | Objective: | Review |  |
|  |  | Assignment: | Study! <br> Review is worth bonus points on the test! |  |
| 101010 | 2/20/2015 | Objective: | TeSt |  |
|  |  | Assignment: | 5.1 Due Today |  |

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Week of $\qquad$ - $\qquad$

Monday

Name: $\qquad$
Period: $\qquad$

Friday

Algebra I - Unit 7: Topic 2 - Multiplying Polynomials

## Practice - Multiplying Polynomials

Name $\qquad$ Date $\qquad$ Period $\qquad$

## Find the product in simplest form

1. $x(3 x+7)$
2. $3 x^{2} y(8 x y-5 x-6)$
3. $4 x\left(-3 x^{2}-2 x\right)$
4. $(2 x+5 y)(2 x-5 y)$
5. $x y(2 x-3 y-4)$

$$
\text { 7. }-3 x\left(x^{2}-4 x+1\right)+5 x^{2}(2 x+3)
$$

4. $(x+2)(x-3)$
5. Find the area of a rectangle with a length of $(5 x+1)$ inches and a width of $(3 x-2)$ inches.
6. What is the perimeter of a square with a dimension of $\left(3 x^{2}+1\right)$ feet?
7. Find the area of the shaded region in simplest form.

$\qquad$ Date $\qquad$ Period $\qquad$

## Find the product in simplest form.

1. $(x+1)(x+4)$
2. $(x+1)(-3 x+1)$
3. $(2 n+3)^{2}$
4. $(k+12)(3 k-2)$
5. $(2 m+1)(m+3)$
6. $(n+1)\left(n^{2}+4 n+5\right)$
7. Find the area of a square with side lengths

8 .Find the area of the shaded region.
( $2 r+7 q$ ) units.

9. LaTanya's modular office is square. Her office in the company's new building will be 2 feet shorter in one direction and 4 feet longer in the other. Write a polynomial expression in simplest terms for the area of her new office.
10. The lengths of consecutive sides of a rectangle are represented by $(2 x+3)$ yards and $(x+4)$ yards.
A) Draw and label a picture of this problem in the space to the right.
B) Express the area of the rectangle in simplest terms.

## Bonus:

1. $\left(y^{2}+7 y-1\right)\left(y^{2}-6 y+5\right)$
2. Write a polynomial, in simplest terms, to represent the volume of the rectangular prism.

$\qquad$ Date $\qquad$ Class $\qquad$

## Test Preparation Practice

## Algebra 1

A.6.C Investigate, describe, and predict the effects of changes in $m$ and $b$ on the graph of $y=m x+b$.

Solve each problem. Choose the best answer for each question and record your answer on the Student Answer Sheet.
Figures are not drawn to scale

1. Which of the following equations has the slope with the greatest absolute value?
A $y=3 x-5$
B $x=9 y+45$
C $9 y=3 x-5$
D $9 y+45 x=5$
2. What will happen to the slope of line $w$ if the line is shifted so that the $y$-intercept increases and the $x$-intercept remains the same?


F The slope will decrease.
G The slope will increase.
H The slope will change from positive to negative.
J The slope will remain the same.
3. The graph of a line is shown below.


If the slope of this line is multiplied by -1 and the $y$-intercept decreases by 2 units, which linear equation would represent these changes?
A $y=-x+2$
B $y=\frac{1}{3} x+2$
C $y=-3 x+2$
D $y=-x-2$
4. Which statement best describes the effect on the graph of $f(x)=5 x+10$ if the $y$-intercept is changed to -5 ?


F The $x$-intercept increases.
G The $y$-intercept increases.
H The new line passes through the origin.
J The slope increases.
$\qquad$ Date $\qquad$ Class $\qquad$
5. Given the function $y=3.25 x-18.75$, which statement best describes the effect of increasing the $y$-intercept by 32.50?

A The new line is parallel to the original.
B The $x$-intercept increases.
C The $y$-intercept decreases.
D The new line has a steeper slope.
6. The line represented by the equation $y=\frac{5}{4} x-2$ is graphed below.


Which of the following best describes the effect on the graph when the value of the slope is doubled?
F The $y$-intercept increases.
G The $y$-intercept decreases.
H The $x$-intercept increases.
$J$ The $x$-intercept decreases.
7. The graph of the line containing points $(-1,-7)$ and $(5,5)$ is shown below.


Which graph represents the line if the value of the slope is doubled and the $y$-intercept remains constant?

A


B


C


D


