$\qquad$
$\qquad$
$\qquad$

## HOMEWORK_W7_DAYS 3

1. Find the prime factorization of 60 .

$$
\begin{array}{ll}
\mathbf{F} & 3^{2} \cdot 10 \\
\mathbf{G} & 2 \cdot 3 \cdot 10 \\
\mathbf{H} & 2 \cdot 2 \cdot 15 \\
\mathbf{J} & 2^{2} \cdot 3 \cdot 5
\end{array}
$$

2. Mrs. Sandoval has 60 folders, $\mathbf{4 5}$ pairs of scissors, and $\mathbf{3 0}$ rulers. What is the greatest common factor Mrs. Sandoval can use to divide the school supplies into equal groups?

A 3
B 5
C 10
D 15
3. What is the constant in the expression $8 x^{3}+5+7 x^{2}+6 x$ ?

A 8
B 5
C 7
D 6
4. Practice: Find the GCF of the following numbers:
a) 4 and 8
c) 21 and 60

The GCF is $\qquad$ The GCF is $\qquad$ .
b) 84 and 36 .
d) 84 and 36 .
$\qquad$ _. $\qquad$ .
5. What's the GCF of 25,60 , and 100 ?

The GCF is $\qquad$ .
6. Find the GCF between 4 and 16 using prime factorization.

The GCF is $\qquad$ .
7. Find the GCF between 36 and 42 using prime factorization.

The GCF is $\qquad$ .
8. Justin was asked to find the GCF of 9 and 12 using prime factorization. After saying he did not need to show his work, because he knew the answer, he wrote down 6. Before Ms. Frost goes to check his work, please help him out. Is Justin's answer correct? Justify your answer by showing the work, then provide a valid explanation.
$\qquad$

## W7_03_Greatest Common Factor Exercises and Practice Worksheet

Use method number 1 (List the factors) for questions 1 to 8 to find the GCF:

1. 35 and 40

35: $\qquad$
$\qquad$ , , $\quad$ )

40: ( , $\qquad$ , $\qquad$ , $\qquad$ ,

GCF = $\qquad$
2. 15,25 , and 10

15: ( $\qquad$ , $\qquad$ , $\qquad$ , $\qquad$
25: ( $\qquad$ , _

10: ( $\qquad$ , $\qquad$ , ,

GCF = $\qquad$
Use method number 2 (Factor Tree) for questions 9 to 16 to find the GCF:
3. 24 and 27

The GCF is $\qquad$ _.
4. 16 and 20

The GCF is $\qquad$ .
5. 36 and 54
$\qquad$ _.
6. 16,24 , and 36

The GCF is $\qquad$ .
7. 8,20 and 14

The GCF is $\qquad$ .
8. 60,90 and 75

The GCF is $\qquad$ .
9. Emma wants to know what is the maximum number of people who can share 42 cookies, 70 apples, and 56 chocolate bars equally.

Answer: $\qquad$
10. Matt is tiling his house and he needs to find out what are the largest square tiles that he could use to tile an area 105 cm by 280 cm ?

