

Marking Period 1 – Practice Test

1. Please determine the LCM of the 6, 9 & 12.

6, 12, 18, 24, 30 (36)
 9, 18, 27 (36), 45
 12, 24, (36), 48

2. Please determine the GCF of 48 & 72.

48
 1 48
 2 24
 3 16
 4 12
 6 8
 8 6
 12 4
 16 3
 24 2
 48 1

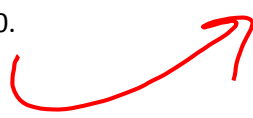
72
 1 72
 2 36
 3 24
 4 18
 6 12
 8 9

3. Please do a prime factorization of 90.

90 → 45 → 9 → 3
 90 → 2
 3
 3
 2 · 3² · 5

180
 180
 90
 60
 45
 36
 30
 20
 18
 15
 12

4. Please list the factor pairs of the following 180.



5. Please simplify the following

a. $\frac{7}{4} + \frac{11}{4}$

$\frac{18}{4} = \frac{9}{2}$

b. $4\frac{1}{3} + 6\frac{1}{5}$

$\frac{13}{5} + \frac{31}{5}$

$\frac{65}{15} + \frac{93}{15} = \frac{158}{15}$

c. $\frac{11}{4} \times \frac{12}{55} \times \frac{25}{18} = \frac{5}{6}$

d. $7\frac{1}{5} \div 1\frac{3}{15}$

$\frac{36}{5} \div \frac{18}{5} = 6$

6. Please rewrite the following to eliminate the “sign sign” phenomenon simplify the following.

a. $-6 - (-9)$

$6 + 9$
 3

b. $6 + (-12)$

$6 - 12$
 -6

c. $8 + (-3)$

$8 - 3$
 5

d. $-7 - (-4)$

$-7 + 4$
 -3

7. Please simplify the following.

a. $4 - 3(6)$

$$\begin{aligned} &4 - 18 \\ &\underline{-14} \end{aligned}$$

b. $12 \times (4 + 3)$

$$\begin{aligned} &12 \times 7 \\ &\underline{84} \end{aligned}$$

c. $7(4) - 4(-3)$

$$\begin{aligned} &28 + 12 \\ &\underline{40} \end{aligned}$$

d. $8 - 2(5 - 2)^2$

$$\begin{aligned} &8 - 2(3)^2 \\ &8 - 2(9) \\ &8 - 18 \\ &\underline{-10} \end{aligned}$$

8. Please simplify the following.

a. $2x + 4 + 9x$

$$\underline{11x + 4}$$

b. $-3b - 5g - 2b + 2g$

$$\underline{-5b - 3g}$$

c. $5(a + 4) - 3a$

$$\begin{aligned} &5a + 20 - 3a \\ &\underline{2a + 20} \end{aligned}$$

9. Please evaluate the following expressions for the given values of the variable.

a. $2b - 9$ $b = -3$

$$\begin{aligned} &2(-3) - 9 \\ &-6 - 9 \\ &\underline{-15} \end{aligned}$$

b. $x - y$ $x = -4$ $y = -3$

$$\begin{aligned} &-4 - (-3) \\ &-4 + 3 \\ &\underline{-1} \end{aligned}$$

10. Please simplify the following.

a. -3^2

$$\underline{9}$$

b. $(-3)^2$

$$\underline{9}$$

~~$-(-3)^2$~~

$$\underline{-9}$$

11. Please match the following

A. The opposite of five squared.

A -5^2

B. Negative five squared.

C $-(-5)^2$

C. The opposite of negative five squared.

D $-(-5^2)$

D. The opposite of the opposite of five squared.

B $(-5)^2$