Review Only!

Answer Key

Chapter 1-2 Exam (20 Questions Total)

Name: Ms. Wang Section:_____ Start time:_____ End time:_____

Please copy the following sentence below as an agreement: ***I understand and agree to show every step and explain my reasoning on all math work. Answers without work will receive a 50% deduction even if correct:***

Yes

1. Write 5^4 as a product.

$\boxed{5 \times 5 \times 5 \times 5} = 625$

2. Simplify 2^3.

$2 \times 2 \times 2 = \boxed{8}$

3. Solve $(9 + 7) \div 2$

$= 16 \div 2$
$= \boxed{8}$

4. Solve $3 \times (5^2 - 2)$

$= 3 \times (25 - 2) = 3 \times 23 = \boxed{69}$

5. State the 4 Properties of Operations

① Associative
② Distributive
③ Identity
④ Commutative

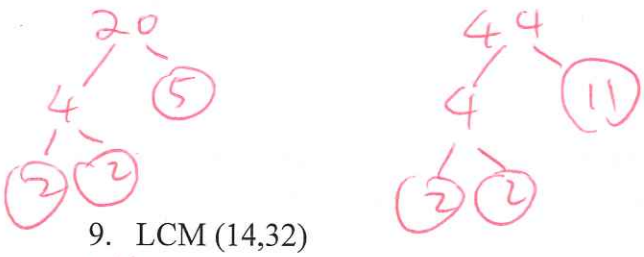
6. State their formulas

① $A \cdot (B \cdot C) = (A \cdot B) \cdot C$
$A + (B + C) = (A + B) + C$
② $a(b + c) = ab + ac$
③ $A + 0 = A$ / $A \cdot 1 = A$
④ $A + B = B + A$ / $A \cdot B = B \cdot A$

7. Simplify using the distributive property: $-2(y - 5)$

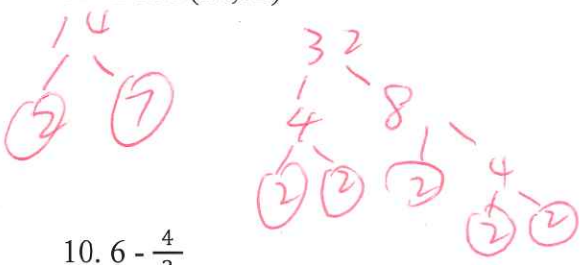
$= (-2 \cdot y) - (-2 \cdot 5)$
$= -2y - (-10) = \boxed{-2y + 10}$

8. GCF(20, 44)



44: 2 × 2 × 11
20: 2 × 2 × 5
2 × 2 = 4

9. LCM (14,32)



32: 2 × 2 × 2 × 2 × 2
14: 2 × 7
2 × 2 × 2 × 2 × 2 × 7
= 224

10. $6 - \frac{4}{3}$

$= \frac{18}{3} - \frac{4}{3} = \frac{18-4}{3} = \frac{14}{3}$

11. $6 \div \frac{4}{3}$

$\frac{6}{1} \div \frac{4}{3} = \frac{6}{1} \times \frac{3}{4} = \frac{6 \times 3}{1 \times 4} = \frac{18}{4} = \frac{9}{2}$

K C F

12. -36.79 + 31.4

$= -5.39$

$$\begin{array}{r} 36.79 \\ -\ 31.40 \\ \hline -5.39 \end{array}$$

13. 38.456 + 22.87

61.326

$$\begin{array}{r} 38.456 \\ +\ 22.870 \\ \hline 61.326 \end{array}$$

14. $\frac{-4}{5} + \frac{7}{5}$

$= \frac{-4+7}{5} = \frac{3}{5}$

15. 66.843 - 43.21

$\boxed{23.633}$

$$\begin{array}{r} 66.843 \\ -\ 43.210 \\ \hline 23.633 \end{array}$$

16. 5.79 × 4.2

① Forget decimal points

② Add them

$$\begin{array}{r} 579 \\ \times\ 42 \\ \hline 1158 \\ 2316 \\ \hline 24.318 \end{array}$$

$\boxed{24.318}$

17. 8.84 ÷ 6.8

88.4 ⇓ 68 ⇓

$$\begin{array}{r} 1.3 \\ 68\overline{)88.4} \\ 68 \\ \hline 204 \\ 204 \\ \hline 0 \end{array}$$

$\boxed{1.3}$

18. $\frac{3}{5} + \frac{3}{2}$

$= \frac{6}{10} + \frac{15}{10} = \frac{6+15}{10} = \boxed{\frac{21}{10}}$

19. $6\frac{1}{6} - \frac{5}{6}$

$= \frac{6\times6+1}{6} - \frac{5}{6} = \frac{37}{6} - \frac{5}{6} = \frac{37-5}{6} = \frac{32}{6} = \boxed{\frac{16}{3}}$

20. 13.78÷ 2.6

137.8 ⇓ 26 ⇓

$\boxed{5.3}$

$$\begin{array}{r} 5.3 \\ 26\overline{)137.8} \\ 130 \\ \hline 78 \\ 78 \\ \hline 0 \end{array}$$

Extra Credit (3 points): Solve $-2(2y + 3x) + 6$

$= (-2\cdot2y) + (-2\cdot3x) + 6$

$= -4y + (-6x) + 6$

$= \boxed{-4y - 6x + 6}$