

Multiple Choice.

1. Which of the following does not show the Commutative Property of Multiplication?

1. D

- A. $ab = ba$ B. $4b = b4$
 C. $(2x)(5y) = (5y)(2x)$ D. $a + b = b + a$

2. Which property of Addition does $6 + (-6) = 0$ illustrate?

2. A

- A. Inverse Property B. Commutative Property
 C. Zero Property D. Identity Property

3. Which property is used in the following expression?

3. B

$4(3 + 2) = 12 + 8$

- A. Associative Property of Multiplication
 B. Distributive Property
 C. Associative Property of Addition
 D. Commutative Property of Addition

4. Which equation shows the Multiplicative Inverse of a Number?

4. C

- A. $a \times 1 = a$
 B. $a + -a = 0$
 C. $a \times (1/a) = 1$
 D. $a \times 0 = 0$

5. Which property is used in the following expression?

5. D

$(6a)4 = 6(a4)$

- A. Associative Property of Addition
 B. Commutative Property of Addition
 C. Distributive Property
 D. Associative Property of Multiplication

6. Simplify this expression: $7(a + b)$

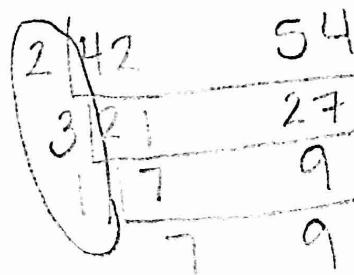
6. C

- A. $7ab$ B. $7a + b$ C. $7a + 7b$ D. $7a + b$

7. Find the GCF of 42 and 54.

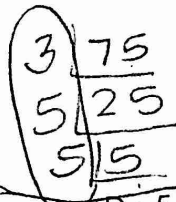
7. A

- A. 6 B. 8 C. 7 D. 12



8. What is the prime factorization of 75?

- A. $3^2 \times 5$ B. 3×5^2 C. 25×3 D. 5×15



8. B
 → these are prime

you can also multiply these to see which gives you 75

Factor each monomial.

9. 24

$$\begin{array}{r} 2 \overline{) 24} \\ \underline{2} \\ 2 \\ \underline{2} \\ 0 \end{array}$$

10. $18x^3y$

$$\begin{array}{r} 2 \overline{) 18} \\ \underline{2} \\ 3 \\ \underline{3} \\ 0 \end{array}$$

9. $2^3 \cdot 3$

10. $2 \cdot 3^2 \cdot x^3 \cdot y$

Find the GCF

11. 28, 42

$$\begin{array}{r} 2 \overline{) 28 \quad 42} \\ \underline{2} \\ 7 \\ \underline{7} \\ 0 \end{array}$$

12. 45, 36

$$\begin{array}{r} 3 \overline{) 45 \quad 36} \\ \underline{3} \\ 3 \\ \underline{3} \\ 0 \end{array}$$

11. 14

12. 9

Simplify each expression by combining like terms.

13. $7a + 5a$

13. $12a$

14. $21 + 8b + b$

14. $9b + 21$

15. $5a + 7 + 6a + 8$

15. $11a + 15$

16. $8m - m$

16. $7m$

17. $22a + 3 + 5a$

17. $27a + 3$

18. $3(m + 5)$

18. $3m + 15$

19. $-2(4 - 6b)$

19. $-8 + 12b$

20. $-5 + 4(a - 3)$ $-5 + 4a - 12$

20. $4a - 17$

21. $-7(3 + 5x)$

21. $-21 - 35x$

22. $2(4 + 8m) + 7(1 + 3m)$
 $8 + 16m + 7 + 21m$

22. $15 + 37m$

Simplify the Fraction.

23. $\frac{7}{49}$

$$\begin{array}{r} 7 \overline{) 7 \ 49} \\ \underline{7 \ 0} \\ 0 \end{array}$$

24. $\frac{6}{54}$

$$\begin{array}{r} 2 \overline{) 6 \ 54} \\ \underline{6 \ 0} \\ 0 \end{array}$$

23. $\frac{1}{7}$

24. $\frac{1}{9}$

Perform the Operation. Circle your answer.

25. $\frac{2}{3} + \frac{2}{5} =$

a. $\frac{4}{8}$

b. $\frac{4}{15}$

c. $\frac{16}{15}$

d. $\frac{2}{10}$

25. _____

26. $\frac{4}{24} \times \frac{16}{20}$

a. $\frac{2}{15}$

b. $\frac{2}{3}$

c. $\frac{1}{15}$

d. $\frac{3}{5}$

26. _____

skip

Perform the Operation (Answers need to be in simplest form)

27. $\frac{2}{5} \div \frac{20}{6}$

28. $\frac{18}{6} \div \frac{32}{38}$

29. $\frac{5}{7} \times \frac{28}{15}$

30. $\frac{2}{5} - \frac{3}{10}$

31. $\frac{2}{5} + \frac{4}{5}$

skip

32. Express $\frac{3}{5}$ as a percent.

A. 3.5%

B. 350%

C. 0.6%

D. 60%

$$5 \overline{) 3.0} \\ \underline{20} \\ 10 \\ \underline{10} \\ 0$$

32. D

33. Express 0.208 as a percent.

A. 0.208%

B. 0.00208%

C. 20.8%

D. 2.08%

$$.6 \times 100 = 60$$

33. C

$$.208 / 100$$

$$\begin{array}{r} 5 \overline{) 15 \ 100} \\ \underline{3 \quad 20} \end{array}$$

$$\frac{15}{100}$$

34. Express 15% as a fraction in simplest form.

A. ~~$\frac{15}{100}$~~

B. $\frac{15}{99}$

C. $\frac{3}{20}$

D. $\frac{1}{10}$

34. C

35. Express 6.8% as a decimal.

A. ~~680~~

B. ~~0.0338~~

C. ~~0.68~~

D. ~~6.8~~

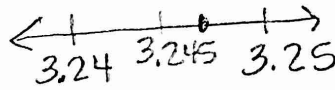
35. .068

Round these numbers to the nearest hundredth.

36. 3.2467

36. 3.25

37. 8.399



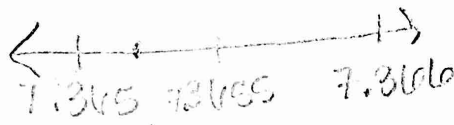
37. 8.40

Round these numbers to the nearest thousandth.

38. 7.36528

38. 7.365

39. 0.74296



39. .743

Perform the indicated operations using order of operations

40. $-50 \div -10$

40. 5

41. $(-3 + 8)^2 - 7$

$5^2 - 7 = 25 - 7$

41. 18

42. $8 - (6 \div 2)$

$8 - 3$

42. 5

43. $(4 - 1)^2 + 18$
 $3^2 + 18 = 9 + 18$

43. 27

44. $3 \times 2 + 4 \div 2$
 $6 + 2$
 $18 + 2$

44. 20

45. $3(4 + 2) - 2 \times 9$
 $3(6) - 2 \times 9$
 $18 - 18$

45. 0